

# **Deposition of David Arthur Swanson, Ph.D.**

**White v. State Board of Election Commissioners**

**October 5, 2023**



**206.287.9066 | 800.846.6989**

1325 Fourth Avenue, Suite 1840, Seattle, Washington 98101

[www.buellrealtime.com](http://www.buellrealtime.com)

email: [info@buellrealtime.com](mailto:info@buellrealtime.com)



White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 1

IN THE UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF MISSISSIPPI  
Greenville Division

---

DYAMONE WHITE, et al., )  
                            )  
Plaintiffs,             )  
                            )  
v.                         ) No. 4:22-cv-00062-SA-JMV  
                            )  
STATE BOARD OF ELECTION     )  
COMMISSIONERS, et al.,     )  
                            )  
Defendants.             )  
                            )

---

DEPOSITION UPON ORAL EXAMINATION

OF

DAVID ARTHUR SWANSON, Ph.D.

---

714 LAKEWAY DRIVE  
BELLINGHAM, WASHINGTON

DATE TAKEN: October 5, 2023

REPORTED BY: Evelyn M. Adrean, RPR, CCR 22009424

BUELL REALTIME REPORTING, LLC  
206.287.9066 | 800.846.6989

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 2

1 A P P E A R A N C E S:

2 FOR PLAINTIFF:

3 ARI SAVITZKY, ESQUIRE  
4 American Civil Liberties Union  
5 125 Broad Street, 18th Floor  
6 New York, New York 10004  
7 212-549-2681  
asavitzky@aclu.org

8 LESLIE F. JONES, ESQUIRE  
9 AHMED K. SOUSSI, ESQUIRE (Appearing remotely)  
Southern Poverty Law Center  
400 Washington Avenue  
Montgomery, Alabama 36104  
334-956-8200  
leslie.jones@splcenter.org  
ahmed.soussi@splcenter.org

10 JONATHAN K. YOUNGWOOD, ESQUIRE (Appearing remotely)  
Simpson Thacher & Bartlett, LLP  
11 425 Lexington Avenue  
New York, New York 10017  
12 212-455-3539  
jyoungwood@stblaw.com

13 NOAH GIMBEL, ESQUIRE (Appearing remotely)  
Simpson Thacher & Bartlett, LLP  
14 900 G Street NW  
Washington, DC 20001  
202-636-5505  
noah.gimbel@stblaw.com

15 FOR DEFENDANTS:

16 MICHAEL B. WALLACE, ESQUIRE  
Wise Carter Child & Caraway, P.A.  
17 600 Heritage Building, 401 East Capitol Street  
Jackson, Mississippi 39201  
601-968-5534  
mbw@wisecarter.com

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 3

1 A P P E A R A N C E S: (Continued)

2

3 GERALD L. KUCIA, ESQUIRE (Appearing remotely)  
4 REX MORRIS SHANNON, III, ESQUIRE (Appearing remotely)  
Mississippi Attorney General's Office  
500 High Street, Suite 1200  
5 Jackson, Mississippi 39205  
6 601-359-3680  
gerald.kucia@ago.ms.gov  
rex.shannon@ago.ms.gov

7

8

9 ALSO PRESENT;

10 Alexandra Hough

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 4

1 DEPOSITION OF DAVID ARTHUR SWANSON, Ph.D.

2 EXAMINATION INDEX

3 EXAMINATION BY PAGE

4 Mr. Savitzky 6

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Page 5

EXHIBIT INDEX	PAGE
EXHIBITS FOR IDENTIFICATION	
1 Notice of Deposition of David A. Swanson, Ph.D.	9
2 Expert Report of David A. Swanson, Ph.D. dated 5 January 2023	10
3 Singleton v. Merrill case law	27
4 Caster v. Merrill case law	29
5 Allen v. Milligan case law	32
6 Robinson v Ardoin case law	36
7 Article: Is "Being Republican" a Risk to One's Health and the Health of Others?	44
8 Article: Is Hawaii A Racial Paradise?	45
9 Declaration of William S. Cooper	57
10 Responsive Declaration of William S. Cooper	65
11 Congressional Redistricting: An Overview November 21, 2021	73
12 Redistricting Criteria updated July 16, 2021	76
13 Redistricting: A Manual for Analysts	86
14 How to Measure Legislative District Compactness If You Only Know It When You See It July 12, 2017 presentation	110
15 How to Measure Legislative District Compactness If You Only Know it When You See It, Slides by Gary King	112
16 Redrawing The Map on Redistricting 2012 Addendum	120
17 Mississippi Board of Trustees of State Institutions of Higher Learning Policies and Bylaws Amended Through July 20, 2023	169
18 Scope of Report and Summary of Conclusions by Traci Burch	200
19 Traci Burch Qualifications and Background	211
20 Declaration of David A. Swanson, Ph.D.	219
21 Article: Vote Overreporting White Black: Identifying the Mechanism Behind Black Survey Respondents' Vote Overreporting	226
22 Article: The Current Population Survey Voting and Registration Supplement Overstates Minority Turnout	227
23 Guide to the 2020 Cooperative Election Study June 2021	235
24 Excel spreadsheet	244
25 Excel spreadsheet	244
26 Article: The Perils of Cherry Picking Low Frequency Events in Large Sample Surveys	280

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 6

1 BELLINGHAM, WASHINGTON; OCTOBER 5, 2023

2 8:57 a.m.

3 DAVID ARTHUR SWANSON, Ph.D., witness herein,  
4 having been first  
duly sworn on oath,  
was examined and  
testified as follows:

5 E X A M I N A T I O N

6 BY MR. SAVITZKY:

7 Q. Good morning, Dr. Swanson.

8 A. Good morning.

9 Q. Good to see you today. So I introduced myself  
already, but I'm Ari Savitzky. I'm an attorney for the  
10 ACLU. I represent the plaintiffs in this matter. Do  
11 you understand that?

12 A. Yes.

13 Q. And can you state your full name for the record  
and spell it?

14 A. David Arthur Swanson, D-a-v-i-d, A-r-t-h-u-r,  
S-w-a-n-s-o-n.

15 Q. All right. And I'll sort of briefly go over  
some of the ground rules for deposition. The court  
16 reporter just swore you in, you're going to be under  
oath, means you're swearing to the truthfulness and  
17 accuracy of your answers. Do you understand that?

18 A. Yes.

19 Q. And the oath that you just took has the same

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 7

1 effect as if you were testifying in court. Do you  
2 understand that?

3 A. Yes.

4 Q. And as you can see, we have the court reporter  
5 here, she's transcribing your answers. It's really  
6 important to answer audibly so that your answers can be  
7 recorded on the transcript. So no nodding or shaking  
8 your head. Do you understand that?

9 A. I do.

10 Q. And I'm going to do my best to wait until  
11 you're finished with an answer, and I would ask you to  
12 sort of wait until I'm finished giving a question before  
13 you start speaking. Does that sound fair?

14 A. It does.

15 Q. All right. I'm going to ask questions, your  
16 job is to answer the question and you have to answer the  
17 questions unless you're instructed not to answer them by  
18 your attorney. Do you understand that?

19 A. I do.

20 Q. Okay. And it's important that we understand  
21 each other. We're going to have a conversation, we're  
22 going to talk about a lot of different topics. If you  
23 don't understand a question, let me know, try to  
24 rephrase it so we can understand each other. Does that  
25 make sense?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 8

1           A. Yes.

2           Q. Okay. And if you need to take a break at any  
3 time, just let me know. The only thing I ask is, if  
4 there's a question pending, if I've asked you a  
5 question, let's finish the question before we take a  
6 break. Okay?

7           A. Sounds good.

8           Q. And if you realize at any time you gave an  
9 answer that wasn't accurate, wasn't complete, just let  
10 me know so that we can get that corrected on the record.  
11 Okay?

12          A. Will do.

13          Q. Any questions about any of the instructions  
14 that I've given here?

15          A. No.

16           MR. WALLACE: Did we just have somebody else  
17 chime in?

18           MS. JONES: Make sure they're on the record.

19           MR. SAVITZKY: I don't know. Do we want to  
20 have everyone who's on the Zoom announce themselves for  
21 the record at this point?

22           MR. YOUNGWOOD: Jonathan Youngwood with  
23 Simpson Thacher & Bartlett.

24           MS. HOUGH: Hi, this is Alexandra Hough,  
25 that's H-o-u-g-h, here on behalf of the plaintiffs.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 9

1                   MR. SAVITZKY: Anybody else on the Zoom who  
2 we haven't registered yet?

3                   THE REPORTER: I think I got the others.

4                   MR. SAVITZKY: Okay.

5 BY MR. SAVITZKY:

6                   Q. And Dr. Swanson, is there any reason that you  
7 can't provide complete and accurate testimony here  
8 today?

9                   A. Not that I know of.

10                  Q. Are you taking any medications or drugs that  
11 might impact your ability to give complete and accurate  
12 testimony?

13                  A. I don't think so.

14                  MR. SAVITZKY: All right. Let's start by  
15 talking about your background. And actually before we  
16 do that, even, I'm just going to mark as Exhibit 1 the  
17 notice of deposition just so we have it in the record.  
18 So I'll mark as Exhibit 1. This is just the notice of  
19 deposition for today's deposition. I'll put it right  
20 there if you'd like to examine it. There's a copy for  
21 you as well.

22                  MR. WALLACE: Is this a copy for me?

23                  MR. SAVITZKY: This is a copy that you can  
24 look at, but no need to ask any questions about it, I  
25 just wanted to mark it in the record.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 10

1           Now what I am going to mark as Exhibit 2 and  
2 hand to you is a copy of the report that you submitted  
3 January 2023. And this one is for you, and here's a  
4 copy for you, Mr. Wallace.

5           MR. WALLACE: Now, that's stamped.

6           Ultimately, that goes with the court reporter; right?

7           MR. SAVITZKY: Correct, yes.

8           MR. WALLACE: Uh-huh.

9           MR. SAVITZKY: So the stamped is for the  
10 court reporter.

11 BY MR. SAVITZKY:

12           Q. So just taking a look at that stamped copy that  
13 I handed you, is that -- does that look like a copy of  
14 your January 2023 report?

15           A. It does.

16           Q. And just looking at Appendix 6 which is on page  
17 136 of this document, just confirm that that's your CV?

18           A. It is my CV that was current as of the time I  
19 submitted this.

20           Q. Any updates that you want to make to your CV  
21 while we're talking about it?

22           A. I think there are more publications I have and  
23 there may be some other things, but I don't think it's  
24 anything substantial.

25           Q. What's your current job?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 11

1           A. My current job is, I'm retired from the  
2 University of California Riverside, I have a .25 full  
3 time equivalent faculty position with Portland State  
4 University's population research center.

5           Q. And is that population research center in a  
6 particular department or is it an independent center?

7           A. It's in the School of Urban Public Affairs, or  
8 whatever the name is of the school right now.

9           Q. And your academic career, fair to say you're a  
10 demographer?

11          A. Yes. Thank you.

12          Q. What is demography?

13          A. It's a study of populations, could be either  
14 human or nonhuman, wildlife, insects.

15          Q. Do you study human demography or the demography  
16 of other species?

17          A. Humans.

18          Q. And would you say that you are an applied  
19 demographer? What kind of demography do you --

20          A. I have a broad range of interests, many people  
21 call me applied, but I do academic work as well.

22          Q. And what type of analysis do you do as a  
23 demographer? How do you analyze human populations?

24          A. I usually take on what the major focuses are  
25 that demographers use, and one is on the size of a

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 12

1 population, second is on the geographic distribution of  
2 the population, third is on the population composition,  
3 fourth is on the components of population change for  
4 building migration, mortality, and the fifth is on the  
5 determinants and consequences of population change.

6 Q. Would it be fair to say that your research is  
7 focused on the areas of social demography and population  
8 health?

9 A. I'm probably more focused on methods other than  
10 social demography and population health, but I've  
11 covered those fields.

12 Q. Okay. Just one second. Have you ever held an  
13 appointment in a political science department in any  
14 institution?

15 A. No.

16 Q. And just looking we'll turn to page 147 of your  
17 resumé -- or your CV, excuse me. That's where the list  
18 of publications begins. Just let me know when you're  
19 there.

20 A. I'm there.

21 Q. Just looking at this list of publications, fair  
22 to say that most of them are about studying human  
23 populations, population change, and forecasting?

24 A. That's fair. I do have a book that has just  
25 been published today that's basically on population

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 13

1 health. It's called Socio-Demographic Perspectives on  
2 the COVID-19 Pandemic. It's an edited book I did with  
3 my colleague Rich Verdugo.

4 Q. Congratulations on the publication.

5 A. Thanks.

6 Q. And so that book is about social demography as  
7 it relates to the COVID --

8 A. It would be more on health demography, but it  
9 also covered methods, how to look at and estimate COVID  
10 infections very early on when you don't have the ability  
11 to use a real complex model with lots of data input  
12 requirements.

13 Q. Okay. So let's talk about some of the tools  
14 and methods that you use in your research. Well, why  
15 don't you tell me about the tools and methods that you  
16 use as a demographer?

17 A. I use most of the standard tools that  
18 demographers use, so I'll use life tables, for example,  
19 I'll do different modeling techniques, regression type  
20 techniques, so that's where it spills over into the  
21 statistical area largely and that is in common with a  
22 lot of other social science fields, we use those kinds  
23 of methods.

24 Q. Do you use software in your research?

25 A. I do.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 14

1 Q. What kind of software tools do you typically  
2 use?

3 A. The major one I use is called NCSS, it's an  
4 acronym. It stands for Number Cruncher Statistical  
5 System.

6 Q. How long have you been using NCSS?

7 A. Since about 1980, '82.

8 Q. Do you ever use SPSS?

9 A. Not for many years.

10 Q. You have used it in the past?

11 A. I have.

12 Q. Ever used Stata?

13 A. Never.

14 Q. Do you ever use the R programming language?

15 A. No.

16 Q. Do you use any other programming languages?

17 A. Visual Basic. I have a minor in math, computer  
18 science, so I know how to program in languages that are  
19 long gone like PL/1, Fortran. Visual Basic is probably  
20 the most current one.

21 Q. How often does your work involve coding in  
22 Visual Basic?

23 A. I've just been working on a project right now  
24 that involves using some Visual Basic coding.

25 Q. Do you ever use any GI S programs?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 15

1           A. I don't implement them, if that's what you're  
2 asking. Yeah, I don't do shape files or I don't do GIS  
3 work myself.

4           Q. You don't work with any geographical mapping  
5 software?

6           A. No.

7           Q. Don't work with Maptitude?

8           A. No.

9           Q. Don't work with ArcGIS?

10          A. No.

11          Q. Do you use survey data in your research?

12          A. Yes, I have.

13          Q. What are some examples of the survey data that  
14 you've used?

15          A. Well when I was at Pacific Lutheran University,  
16 I ran a small institute, and we did annual surveys of  
17 Pierce County, so I was responsible for going out and  
18 contracting with a private vendor to actually conduct  
19 the surveys and supervise them, put the questionnaires  
20 together. When I worked on the Yucca Mountain high  
21 -level nuclear waste repository, I was responsible for  
22 surveys that were done of people that were in the impact  
23 area, so --

24          Q. Sorry, go ahead. Finish your --

25          A. That's okay. Go ahead.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 16

1 Q. Those are surveys that you conducted?

2 A. Yes.

3 Q. Do you ever work with survey data that has been  
4 gathered by others?

5 A. I have.

6 Q. Do you ever work with ACS, American Community  
7 Survey --

8 A. I do.

9 Q. -- data?

10 A. Wrote a book on that -- or a section of a book  
11 for the ACS when that first started coming out, was part  
12 of the pilot study programs for the ACS.

13 Q. Do you ever use voter rolls in your work?

14 A. Not until I started doing expert witness work.  
15 Or looked at them, but I don't use them.

16 Q. You don't use voter rolls in your work?

17 A. No.

18 Q. And you said when you started doing expert  
19 work --

20 A. Witness work in areas like redistricting, in  
21 the case we're talking about now. I'm aware more of  
22 voter rolls, but I haven't actually used it -- yeah,  
23 there's actually one exception. I did a volunteer  
24 survey for Kitsap County, Washington that was in regard  
25 to some issue that was going to be on the ballot. And

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 17

1 the people I worked with that was probably now defunct,  
2 the Kitsap County Sun, which is a newspaper, had access  
3 to voting rolls. So we were calling people who  
4 registered voters.

5 Q. And when did you conduct this Kitsap County,  
6 Washington survey?

7 A. Early 1990s, late 1980s.

8 Q. And so other than that instance, you haven't  
9 used voter rolls in your work?

10 A. That's correct.

11 Q. Ever use ecological inference analysis?

12 A. I have.

13 Q. Tell me about your use of ecological inference.

14 A. It's not the guaranteeing program, but I've  
15 used ecological inferences in -- one of the publications  
16 I have, actually. It's in the Journal Demography, and  
17 it takes a state level regression method for estimating  
18 life expectancy at birth and applies it to subcounty  
19 areas. And that, in fact, would be ecological inference  
20 because you went from a higher level of aggregation to  
21 lower levels of aggregation. And the paper involved  
22 doing a test of its accuracy.

23 Q. And you mentioned it's not Gary King's method?

24 A. That's correct.

25 Q. So it's not the R x C method?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 18

1 A. That's correct.

2 Q. Is it a homogenous precinct type analysis that  
3 you did?

4 A. It's a regression analysis. And people can use  
5 multilevel regression analyses to do things that are  
6 very similar to ecological analysis.

7 Q. And other than that -- and was that just one  
8 example? Have you used ecological inference analyses in  
9 other instances in your work?

10 A. There my be. That's one I can recall.

11 Q. And as you sit here, can you recall any others?

12 A. Not offhand.

13 Q. In your research, have you studied voting  
14 behavior?

15 A. No.

16 Q. Have you published any scholarly work on voting  
17 behavior?

18 A. No.

19 Q. Any scholarly work on voter turnout?

20 A. No.

21 Q. Have you published any political science  
22 journals?

23 A. Not that I can think of. There might be some  
24 journals with the term "political" in it, but I can't  
25 recall for sure.

Page 19

1           Q. And we'll talk about CES, Cooperative Election  
2 Survey studies -- data later, but have you ever used  
3 that CES study before this case?

4           A. No.

5           Q. Were you familiar with the CES before your  
6 involvement in this case?

7           A. No.

8           Q. Have you ever drawn an electoral map before?

9           A. No.

10          Q. And I'm looking at pages 6 and 7 of your  
11 report. I'll let you take a second to get there. This  
12 is your --

13          A. This is the report of January you're talking  
14 about again?

15          Q. Yes, correct. The one that's been marked, I  
16 believe, as Exhibit 2. You sort of summarize here some  
17 of the expert work and some of the other references in  
18 your CV; is that right?

19          A. That's correct.

20          Q. And you say that you played an active role in  
21 the development of redistricting, a manual for  
22 practitioners, analysts, and citizens. Do I have that  
23 right?

24          A. That's correct.

25          Q. What was the role that you played in the

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 20

1 development of that?

2 A. I reviewed the work that Peter Morrison and Tom  
3 Bryan did, the authors of that book. I helped them with  
4 some questions on how to do methods.

5 Q. And what parts of the -- of that work did you  
6 review?

7 A. I can't remember. I -- basically the whole  
8 book, but I concentrated especially on some of the  
9 measurement issues.

10 Q. And you provided comments?

11 A. I did.

12 Q. You're not credited as an author of the book?

13 A. No.

14 Q. You're mentioned in the front matter and the  
15 dedication and acknowledgments?

16 A. I believe that's true.

17 Q. That's not a peer-reviewed publication, is it?

18 A. Every book I've been associated with goes  
19 through a review process that's set up by the publisher.  
20 So in a sense, it's a peer-review process. They  
21 internally will go out and ask reviewers. You know, I  
22 served as a series editor of Applied Demography for  
23 Springer Publications, and if we get a proposal, it goes  
24 out to review to other people. So in a sense it's peer  
25 reviewed, but not in the same manner that people think

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 21

1 of as academic journal peer reviews.

2 Q. So the redistricting title was not peer  
3 reviewed in the same way as an academic journal?

4 A. No. But it's a Springer publication, I  
5 believe, so it went through some sort of review process.

6 Q. And you're not aware of what their review  
7 process was, if any, for this particular title?

8 A. I'm just aware that they are likely to have  
9 sent it out for a review to at least one, probably two,  
10 other people to look at it before they even accepted the  
11 proposal, and they may have done it sometime during the  
12 whole process where they're putting it together. You'd  
13 have to ask the editors at -- the people in charge of it  
14 at Springer, for example.

15 Q. But you don't know, that's your assumption?

16 A. Well it's more than an assumption because I can  
17 see some of the paperwork that flows back and forth. So  
18 I know they're reviewing it, but exactly the details, I  
19 don't know.

20 Q. You saw the paperwork for -- with respect to  
21 this redistricting title?

22 A. I think I did. I see it for almost every time  
23 that's ever come through my hands when I do it for  
24 Springer, so I'm guessing that's the case.

25 Q. So let's talk about your prior expert work, and

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 22

1 we can stay looking at pages 7 and 8 of your January  
2 report Exhibit 2 where you list some of that work. It's  
3 also, I think, on page 187 of your CV, but this synopsis  
4 that you have here will do just fine.

5 Looking at some of the on-the-stand  
6 testimony that you list, these mostly involved instances  
7 where you testified about population forecasting; is  
8 that right?

9 A. Some -- one, two, three, at least three of them  
10 did.

11 Q. I see a case about water rights in Arizona,  
12 life expectancy, patient populations. None of the cases  
13 you list here are voting rights or voting-related cases;  
14 right?

15 A. That's correct.

16 Q. You never testified in a voting rights case  
17 before?

18 A. That's correct.

19 Q. And do you know whether the court in the cases  
20 or the courts, I should say, in the cases that you  
21 testified in previously credited your testimony?

22 A. What does "credited" mean?

23 Q. Do you know whether they viewed it favorably,  
24 they relied on it in coming to their decision?

25 A. Well, I was sworn in as an expert witness in

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 23

1 the case where I did testify, so I assume they used it  
2 in some manner.

3 Q. You don't know which manner they used it in?

4 A. No.

5 Q. Okay. And looking at some of these cases that  
6 you have listed here, you indicate there's some cases  
7 where you produced -- and actually, let's look at page 8  
8 where you say: "I produced expert reports as a  
9 consultant of potential expert witness in other court  
10 cases." You have a list of those here on page 8. None  
11 of these are voting-related cases?

12 A. That's correct.

13 Q. And you never submitted a report in any  
14 voting-related case?

15 A. That's correct.

16 Q. And then on page 8, paragraph 9 you say you  
17 served as a consultant to Bryan GeoDemographics, BGD, in  
18 regard to certain redistricting cases. Do I have that  
19 right?

20 A. You do.

21 Q. What is Bryan GeoDemographics?

22 A. It's a company owned and operated by Tom Bryan.  
23 He calls it a boutique consulting company based near  
24 Richmond or in Richmond, Virginia.

25 Q. What is your role as a consultant for Bryan

Page 24

1 GeoDemographics?

2 A. It varies. He -- when Tom Bryan contacts me,  
3 it's usually about questions about a method.

4 Q. What kind of questions would he contact you  
5 with?

6 A. I'd have to look up to remember them all, but  
7 typically involve methods, statistical and otherwise,  
8 sometimes demographic measures, sometimes summary-type  
9 measures.

10 Q. What's an example?

11 A. I'd have to think about one off the top of my  
12 head. I believe I've worked with him on doing some  
13 statistical things. And they may have -- occur in the  
14 book that he and Peter did too. But I haven't thought  
15 about in a while, so off the top of my head I can't  
16 remember what they were.

17 Q. And you said you've been working as a  
18 consultant with Bryan GeoDemographics since about 2021?

19 A. Give or take that's correct.

20 Q. And you mentioned four cases here in paragraph  
21 9 for which you serve as a consultant to Bryan  
22 GeoDemographics, two of them are Caster versus Merrill  
23 and Singleton versus Morrill; is that right?

24 A. Yes. Whatever's listed. And I don't remember  
25 the cases. I know they're -- I just put them down in my

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 25

1 vitae once I send reports to Tom and he told me what the  
2 cases were.

3 Q. And do you know that those are cases involving  
4 Alabama's congressional districting from the 2020 cycle?

5 A. Not offhand I wouldn't.

6 Q. What did you do as a consultant in those cases?

7 A. Generally, Tom would ask me questions about a  
8 method, and I would respond to them and try and give him  
9 advice.

10 Q. Did you conduct any analysis of Alabama's black  
11 belt as part of your consulting on those cases?

12 A. No.

13 Q. Did you conduct any analysis on the gulf coast  
14 area of Alabama as part of your analysis in those cases?

15 A. Not in those cases, but I've done work on --  
16 with an attorney in Texas that looked at the effects of  
17 the oil spill where we looked at all the gulf coast, and  
18 part of that involved gulf coast populations, but it  
19 wasn't a voting rights case.

20 Q. And you -- do you draw any electoral maps or  
21 review any electoral maps in your consulting in the  
22 Caster and Singleton case?

23 A. Not that I recall. I certainly didn't draw  
24 any. Usually the questions that Tom asks me are about  
25 is this an appropriate statistical method to use in this

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 26

1 test? If it's a t-test, for example, should I use the  
2 equal variance assumption or the unequal variance  
3 assumption? If I use regression after I've transformed  
4 variables, what would I do? So those are the types of  
5 questions I typically help with him.

6 Q. And so, for example, he would take the analysis  
7 that he'd done, take it to you and say, does this  
8 methodology look right to you?

9 A. Sometimes they're even in advance of that.  
10 He'd ask me what kind of advice would you give me on  
11 some technique to use. And I stress I'm probably not  
12 the only one he's asking for advice.

13 Q. And you know that Mr. Bryan and Bryan  
14 GeoDemographics were working to defend the electoral  
15 maps that were challenged in those Alabama cases?

16 A. That I do know.

17 Q. And do you know how the Court decided those  
18 cases?

19 A. No.

20 Q. Do you know whether the Court determined that  
21 the congressional districts in Alabama -- or the  
22 challenged congressional districts in Alabama was likely  
23 unlawful?

24 A. No. I don't follow the court cases.

25 Q. Do you know whether the Court in those cases

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 27

1 credited the analysis and testimony that Bryan provided?

2 A. I don't know.

3 MR. SAVITZKY: And I just want to mark  
4 now -- what exhibit are we on?

5 MS. JONES: 3.

6 MR. SAVITZKY: Just going to mark as Exhibit  
7 3, this is the Singleton case. And I'll hand this copy  
8 to you and this copy to you, Mr. Wallace.

9 MR. WALLACE: Very good.

10 MR. SAVITZKY: And take a peek over my copy.

11 BY MR. SAVITZKY:

12 Q. And you can turn to page -- excuse me. Let's  
13 turn to page 1007. The pages are marked in the top  
14 right corner. And just let me know when you're there.

15 A. I'm there.

16 Q. And just looking at that first -- it's right in  
17 the top left, the Court says: "We're concerned about  
18 numerous other instances in which Mr. Bryan offered an  
19 opinion without a sufficient basis or in some instances  
20 any basis." Did I read that accurately?

21 A. Yes.

22 Q. And the Court lists various instances. And  
23 then looking at that time the next page, page 1008, the  
24 last sentence of the first full paragraph, the Court  
25 says that: "Mr. Bryan overstated his opinions, offered

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 28

1 testimony without a sufficient basis, cited material  
2 that he had not reviewed, offered opinions at the  
3 preliminary injunction hearing that he had not offered  
4 in his reports." Is that --

5 MR. WALLACE: Go ahead and read the whole  
6 sentence instead of paraphrasing from the middle.  
7 That's a form objection.

8 MR. SAVITZKY: That's fine. We can do that.

9 BY MR. SAVITZKY:

10 Q. The Court said in that last sentence:  
11 "Although the schedule might have limited Mr. Bryan's  
12 ability to perform some work that he otherwise might  
13 have performed, it did not cause him to overstate his  
14 opinions, offer testimony without a sufficient basis,  
15 cite material that he had not reviewed, or offer  
16 opinions at the preliminary injunction hearing that he  
17 had not offered in his reports." Did I read that  
18 accurately?

19 A. You did.

20 Q. And then looking at the last sentence in the  
21 last paragraph, last full paragraph, I should say, on  
22 that same page, the Court says: "Because Mr. Bryan  
23 consistently had difficulty defending both his methods  
24 and his conclusions and repeatedly offered opinions  
25 without a sufficient basis and because we observed

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 29

1 internal inconsistencies in his testimony on important  
2 issues, we find that his testimony is unreliable." Did  
3 I read that right?

4 A. You did.

5 MR. SAVITZKY: And just for completeness,  
6 I'm also going to mark as Exhibit 4 the Caster case.  
7 And here is your copy. And Mr. Wallace there's a copy  
8 for you.

9 BY MR. SAVITZKY:

10 Q. And just looking at the Caster case we can turn  
11 to pages 52 and 53 of the document. And we don't have  
12 to reread it all, but I just want you to confirm for me  
13 that --

14 MR. WALLACE: Can I stop you and ask: I'm  
15 trying to find the pagination here. You've got these --  
16 are you looking at the asterisks, the --

17 MR. SAVITZKY: No. The pagination is right  
18 at the bottom of the page.

19 MR. WALLACE: Oh, I see where we are. Okay.  
20 Give me those numbers again, please?

21 MR. SAVITZKY: It's just starting at  
22 page 52.

23 MR. WALLACE: Okay.

24 BY MR. SAVITZKY:

25 Q. And I just want to confirm that this is

Page 30

1 verbatim the same statements are in the Caster opinion  
2 as well. So starting in the first full paragraph in the  
3 seconds column on page 52: "We're concerned about  
4 numerous other instances in which  
5 Mr. Bryan offered an opinion about a sufficient basis or  
6 in some instances any basis." Same statement?

7 A. Where are you reading?

8 Q. On page 52, last part of the first full  
9 paragraph.

10 A. That would be paragraph 60?

11 Q. No. Just on the second column, the first full  
12 paragraph of the second column on page 52.

13 A. The one that starts out "separate"?

14 Q. Correct. And the last -- after the citation  
15 there: "We are concerned about numerous instances in  
16 which Mr. Bryan offered an opinion without a sufficient  
17 basis or in some instances any basis."

18 A. I see that. I do.

19 Q. Okay. And then moving to the next page,  
20 page 53, same statement that we read from the Singleton  
21 opinion, this is in the second to the last paragraph in  
22 the first column. "Although the schedule might have  
23 limited Mr. Bryan's ability to perform some work that he  
24 otherwise might have performed, it did not cause him to  
25 overstate his opinion, offer testimony without a

Page 31

1 sufficient basis, cite material that he had not  
2 reviewed, or offer opinions at the preliminary  
3 injunction hearing that he had not offered in his  
4 reports." Same statement as before; and that's right?

5 A. That is.

6 Q. Okay. And then just looking at the next page,  
7 page 54, last sentence of the first paragraph there,  
8 again same conclusion: Mr. Bryan consistently had  
9 difficulty defending his methods and his conclusions,  
10 repeatedly offered opinions without a sufficient basis,  
11 and concluding that his testimony is unreliable; right?

12 A. I read that.

13 Q. Okay. So let me ask you another question: Do  
14 you know whether the supreme court ended up ruling in an  
15 appeal in the Singleton and Caster cases?

16 A. I do not.

17 Q. Do you know whether William Cooper, plaintiff's  
18 mapping expert in this case, the White case, drew any of  
19 the plaintiff's illustrative maps in the Alabama cases?

20 A. I don't recall. I don't know.

21 Q. Do you recall conducting any analysis in  
22 Mr. Cooper's maps in the Alabama cases?

23 A. No.

24 Q. Would you dispute that a panel of three medical  
25 judges in the Singleton case found that the plans that

Page 32

1 Mr. Cooper drew in Alabama were consistent with  
2 traditional districting principles?

3 A. I'm not in a position to dispute or not dispute  
4 it.

5 Q. And we can just look back at Exhibit 4, which  
6 you should still have in front of you -- excuse me,  
7 Exhibit 3 in the Singleton case here. And I just want  
8 to look at page 1016 this time. Excuse me, 1015.

9 MR. WALLACE: 15?

10 MR. SAVITZKY: Sorry, 16.

11 MR. WALLACE: 16.

12 MR. SAVITZKY: Strike that. That's all  
13 right. We don't have to do that.

14 BY MR. SAVITZKY

15 Q. And you said you didn't know whether the  
16 supreme court reviewed these decision?

17 A. I believe -- I knew that it went to the supreme  
18 court, but I just don't follow whatever they did with  
19 it. And I may have heard from Tom about it, but that  
20 didn't stick in my head.

21 MR. SAVITZKY: And we can now mark as 5,  
22 this is the supreme court's decision reviewing those  
23 Alabama -- Alabama decisions. Copy for Mr. Wallace.  
24 I'm looking at page 15 on the bottom of this document,  
25 second column, first full paragraph. Let me know when

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 33

1 you're there.

2 MR. WALLACE: All right. This is page 15 of  
3 Westlaw print-off and it's somewhere.

4 MR. SAVITZKY: Second column.

5 MR. WALLACE: Okay.

6 BY MR. SAVITZKY:

7 Q. So first of all just in the first full sentence  
8 in that second column, that Caster plans to rely on  
9 illustrative maps produced by expert Bill Cooper. Do I  
10 have that right?

11 A. Are you asking me?

12 Q. Yes.

13 A. Yes, that's what it says.

14 Q. And then looking at that next paragraph, says:  
15 "The District Court agreed, found Cooper's testimony  
16 highly credible commended Cooper for working hard to  
17 give equal weight to all traditional districting  
18 criteria." Do I have that right?

19 A. That's what I read.

20 Q. And then the last -- and actually, we'll  
21 continue on. The next sentence: "The Court also  
22 explained that Alabama's evidence of racial predominance  
23 in Cooper's maps was exceedingly thin. Alabama's expert  
24 Thomas Bryan testified he never reviewed the exhibits to  
25 Mr. Cooper's report and never reviewed one of the

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 34

1       illustrative plans that Cooper submitted." That's  
2 right?

3           A. It is.

4           Q. And just skipping a sentence going to: "By his  
5 own admission, Bryan's analysis of any race predominance  
6 in Cooper's maps was pretty light. District court did  
7 not err in finding that race did not predominate in  
8 Cooper's maps in light of the evidence before it."

9 Right?

10          A. That's what I read, too.

11          Q. So you also mentioned -- and we can put those  
12 aside for now, maybe put them over here if we're not  
13 using them. We'll want to hang onto this.

14                 And in fact, just referring back to it,  
15 page 8 of your report, you also mention that you worked  
16 on the Ardoin case, Robinson v. Ardoin? That's the  
17 Louisiana congressional districting case? I'm looking  
18 at page 8 of your report.

19          A. Yes.

20          Q. Okay. And what did you do as a consultant for  
21 Bryan GeoDemographics in that case?

22          A. I'd have to look back at my records and see  
23 what I did, if I have e-mail correspondence. Again,  
24 most of these where I would serve as a consultant to  
25 him, he'd either contact me via e-mail or call me and

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 35

1 ask me questions about particular methods or ask me for  
2 advice on these or something. And I don't recall  
3 specifically what it was.

4 Q. Do you recall how actively involved you were in  
5 consulting on the Ardoin case for Bryan GeoDemographics?

6 A. No.

7 Q. Do you recall whether you worked on a  
8 misallocation analysis?

9 A. That sounds familiar. I think I did.

10 Q. And to be clear, you didn't draw any electoral  
11 maps in that case?

12 A. I did not.

13 Q. Would you say that the analysis in that case  
14 from Mr. Bryan reflects your input in your analysis?

15 A. It may reflect some of my advice that I give to  
16 him about misallocation error or how to measure it?

17 Q. And by the way, for those Alabama cases, Caster  
18 and Singleton, would you say that Mr. Bryan's analysis  
19 reflects your input in your analysis as well?

20 A. I don't know.

21 Q. And you know that Thomas Bryan and Bryan  
22 GeoDemographics were working to defend the congressional  
23 districts that were challenged on behalf of the State of  
24 Louisiana in that case?

25 A. Yes.

Page 36

1           Q. Did you review the Court's decision in the  
2 Ardoин case?

3           A. No.

4           Q. Do you know whether the Court determined that  
5 the challenged congressional district there likely  
6 violated the Voting Rights Act?

7           A. No.

8           Q. And this is the last one of these, I swear.  
9 I'm not going to take that back rather than swear to  
10 anything. I'm just going to mark a copy of the Ardoин  
11 case. I think we're on Exhibit 6. And --

12           MR. WALLACE: I'm missing the first page of  
13 it. I'm sure I can get it someplace else, but --

14           MR. SAVITZKY: Happy to.

15           MR. WALLACE: Did you miss a page?

16           MR. SAVITZKY: Here, I'll give you my first  
17 page. I may have missed one.

18 BY MR. SAVITZKY:

19           Q. So would you dispute that the federal judge in  
20 the Ardoин case agreed with the plaintiffs and held that  
21 the challenged congressional districts there violated  
22 the -- likely violated the Voting Rights Act?

23           A. I don't know what decision the judge made, so  
24 I'm not in a position to dispute it or not dispute it.

25           Q. Do you know whether the Court credited the

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 37

1 analysis that Thomas Bryan and Bryan GeoDemographics  
2 provided?

3 A. I don't know.

4 Q. And looking at what's been marked as Exhibit 6,  
5 and turning to page 824, and we can start just in that  
6 first full paragraph. Let me know when you're there.  
7 First full sentence: "After observing Bryan on the  
8 stand in this case, the Court finds his demeanor was not  
9 so problematic as to disqualify him. But the Court  
10 found his methodology to be poorly supported, his  
11 conclusions carried little, if any, probative value on  
12 the question of racial predominance." Did I read that  
13 right?

14 A. You did.

15 Q. Okay. And then in the next paragraph, the  
16 Court discusses how Bryan opined that race was a  
17 prevailing factor in the design of plaintiff's  
18 illustrative plans based on his "index of misallocation"  
19 which purports to flag areas where a disproportionate  
20 share of the black population was grouped into a  
21 majority, minority district."

22 Is that the misallocation analysis that we  
23 were talking about before?

24 A. Yeah, I'm sure what I helped him with was in  
25 regard to how do you measure misallocation.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 38

1           Q. Okay. And then looking at the next paragraph,  
2 the Court says: "Even if this misallocation method is  
3 accepted, the factual assumptions upon which his  
4 conclusions rest are absent in this case. Hence,  
5 Bryan's conclusions are unsupported by the facts and  
6 data in this case and thus wholly unreliable." Did I  
7 read that right?

8           A. You did.

9           Q. And then moving to the next column, first full  
10 paragraph, concluding, the Court says: "Finally, the  
11 Court finds that Bryan's analysis lacks rigor and  
12 thoroughness which further undermines the reliability of  
13 his opinions." Do I have that right?

14           A. You do.

15           Q. And in the last sentence: "For the foregoing  
16 reasons, the Court gives very little weight to Bryan's  
17 analysis and conclusions." Is that right?

18           A. It is.

19           Q. Okay. Now, the last case you mentioned -- and  
20 we can put that one away as well. Put it right here.  
21 Thank you.

22           So the last case is McConchie versus the  
23 State Board of Elections that you listed. Is that an  
24 Illinois redistricting case?

25           A. I think that was Illinois.

Page 39

1           Q. Do you know what the legal issue is in that  
2 case?

3           A. No.

4           Q. Do you know whether it involved the Voting  
5 Rights Act or racial votes dilution?

6           A. I don't.

7           Q. Do you remember anything about what the case  
8 was about?

9           A. No. Seriously, I don't.

10          Q. Do you remember anything about the analysis  
11 that you did for Mr. Bryan?

12          A. I'd have to look back at my records and see  
13 what questions he asked me.

14          Q. So as I understand it, the issue in that case  
15 is whether it violated the federal constitution for  
16 Illinois to use ACS population estimates to draw their  
17 legislative districts rather than waiting for the 2020  
18 census to come out. Does that sound right to you?

19          A. It does sound familiar.

20          Q. And the issue was that because ACS estimates  
21 are estimates and not full measures of the population as  
22 with the census, that was a one person, one vote  
23 problem, it couldn't be sure that you had one person,  
24 one vote allocation for population across the districts.  
25 Does that sound right?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 40

1           A. I don't know how people viewed a sample based  
2 estimate compared to the census and how they used it.  
3 That part I don't know.

4           Q. But based on what you recall, it wasn't a case  
5 about racial vote dilution or racial representation?

6           A. I don't recall.

7           Q. So in the three cases where -- well, let me  
8 strike that.

9                 You do understand that the Caster and the  
10 Singleton and Robinson cases are about racial vote  
11 dilution?

12          A. I believe that's the case.

13          Q. So in the three cases where you consulted for  
14 Bryan GeoDemographics that you know involved racial vote  
15 dilution, in each one of those cases the Court did not  
16 credit the Bryan GeoDemographics analysis; right?

17          A. That's what appears to be the case based on  
18 what you read.

19          Q. Now, in your January report looking on to  
20 page 10 -- you have it if you want to look at it -- you  
21 say: "Because of its expertise and experience, I have  
22 used the services of Bryan GeoDemographics which under  
23 my direction has assembled data, maps, and other work  
24 product." So you use Bryan GeoDemographics to assemble  
25 data, maps, and work product for your report in this

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 41

1 case?

2 A. I'm sorry, where are you at?

3 Q. Oh, I'm sorry. Paragraph 10 on page 8. That's  
4 my -- my mistake. Just the next paragraph from what we  
5 were talking about: "Because of its experience and  
6 expertise, I've used the services of Bryan  
7 GeoDemographics to assemble data, maps, and other work  
8 product." For this case for your report in this case,  
9 yes?

10 A. Yes.

11 Q. And just looking -- I mean, I looked at the  
12 maps in your report, they tend to have produced by Bryan  
13 GeoDemographics legends or notes at the bottom; is that  
14 right?

15 A. That's correct.

16 Q. So who actually created those maps and other  
17 tables that are indicated as being produced by Bryan  
18 GeoDemographics in your report?

19 A. They were -- they were done under a request  
20 from me to -- I would -- could use a table or a graph or  
21 something like this to put together in my report.

22 Q. And then Thomas Bryan created them?

23 A. Yes.

24 Q. And what information did you give him to  
25 instruct him to create the report?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 42

1           A. I gave him a general picture of what I wanted  
2 to see in a table or a graph, and then he produced it  
3 using probably the Public Law 94171 data or whatever  
4 else was involved in it.

5           Q. Do you know what software he used to create --

6           A. Maps.

7           Q. To create the maps, yeah.

8           A. I think he uses map -- or the -- what's the  
9 company in Redlands, California -- Arcinfo. I believe  
10 that's what he used I'm pretty sure he uses things from  
11 that group.

12          Q. Do you know what software he used to create any  
13 data tables that he created for you for these purposes?

14          A. He usually uses Excel.

15          Q. Is this work that you could have done yourself?

16          A. Most of it involves really large files, and  
17 he's adept at bashing around data and big files and  
18 using parts of Excel that I don't use routinely like  
19 pivot tables. So I probably could have done it but it  
20 would have been a learning curve for me to get to that  
21 point and also assemble all the data and have it  
22 together. So it was much easier to work through Tom.

23          Q. Did he also provide substantive comments or  
24 analysis on the types of analysis that you were doing  
25 for your report?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 43

1           A. No.

2           Q. Do you know whether any of the methods that you  
3 used are the same methods that he used in the Louisiana  
4 or Alabama cases?

5           A. I'd have to look at the reports to see.

6           Q. Could any of the reports -- analyses that  
7 you've done be characterized as a misallocation analysis  
8 similar to what Mr. Bryan did in Louisiana?

9           A. I can't recall using a misallocation index.

10          Q. Did Bryan GeoDemographics run the compactness  
11 analyses that you use in your report?

12          A. He produced the Excel tables that produced  
13 numbers for that.

14          Q. And did he actually produce the compactness  
15 scores that you used?

16          A. The scores, yeah. He's got that, I think,  
17 written up in various ways so he can produce them pretty  
18 quickly.

19          Q. Looking back at your resumé, and I'm to turn to  
20 page 159 of your report. Just a couple more items. I  
21 don't want to -- it's a long resumé, I know. On page  
22 158 you list some non-refereed articles. And one of  
23 them is an internet article from around the time of the  
24 2020 election called: Is Being Republican a Risk to  
25 One's Health and the Health of Others? Do you see that?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 44

1 A. I do.

2 MR. SAVITZKY: And I'm just going to mark a  
3 copy of that as Exhibit 7.

4 MR. WALLACE: This on page 159?

5 MR. SAVITZKY: Correct.

6 MR. WALLACE: Okay.

7 MR. SAVITZKY: Let me just confirm that for  
8 you. Oh, you know what, it's on page 160, third one  
9 from the bottom. It's a long list of non-refereed  
10 articles that we have here. And we're marking this  
11 article as Exhibit 7.

12 BY MR. SAVITZKY:

13 Q. And in this article, you looked at heavily  
14 Democrat and Republican counties and you compared per  
15 capita case rate of COVID?

16 A. They were counties that had voted one way or  
17 another in the presidential election.

18 Q. And your finding was that: Per capita, the  
19 cases of COVID in areas that voted heavily Republican  
20 were higher and they were increasing even though they  
21 were sort of more sparsely populated?

22 A. That's correct.

23 Q. And you concluded that this finding: "Supports  
24 the view that residents of those areas are ill disposed  
25 to outside mandates to self isolate, practice social

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 45

1 distancing, and wear masks possibly due to  
2 misinformation they consumed from conservative media  
3 outlets."

4 A. Yes.

5 Q. And you concluded: "Our take is that political  
6 orientations should be considered along with other  
7 factors likely to generate COVID-19 cases. So along  
8 with testing and its accuracy, data suppression,  
9 potential superspreader venues, population density,  
10 rates of interaction, age, race, and ethnicity and  
11 gender, we believe that being Republican or being in  
12 proximity to them could be a very real risk factor."

13 A. That's correct.

14 Q. And you still agree that being a Republican  
15 could be considered a risk to your own health and that  
16 of others with respect to COVID?

17 A. It was at that point in time. Whether is it  
18 now, I'd have to go back and research it again. But it  
19 definitely appeared to be the case when we did that  
20 research.

21 Q. Okay. And just one other article, one of these  
22 non-refereed articles, and we'll mark that as Exhibit 8.  
23 This is an article from a publication called Zócalo  
24 entitled: Is Hawaii a Racial Paradise. Do you recall  
25 this article?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 46

1           A. I do.

2           Q. This is, I think, a forum -- sort of internet  
3 forum set of articles. And your article's on page 5 of  
4 this document, if you want to turn to it. And it's  
5 specifically entitled: "Compare Hawaii and  
6 Mississippi." Do I have that right?

7           A. It is.

8           Q. And in your article, you note that Hawaii has a  
9 very high proportion of people who identified as  
10 multiracial, where as Mississippi has a lowest  
11 proportion of people who identify as multiracial; is  
12 that right?

13           A. That is.

14           Q. And you note that Hawaii has the highest life  
15 expectancy, and Mississippi has one of the lowest or the  
16 lowest?

17           A. That's correct.

18           Q. And you note that Mississippi is well below the  
19 U.S. average in terms of people with bachelor's degrees?

20           A. Yes.

21           Q. And you note that Hawaii has less poverty than  
22 the national average and Mississippi has significantly  
23 higher levels of poverty?

24           A. Yes. And I'd say that that was as of the date  
25 I did the article, so things may have changed. But

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 47

1 you're reading this correctly for the dates that I had  
2 the data.

3 Q. You don't have any reason to think that that's  
4 changed since this article was published?

5 A. I don't know.

6 Q. You don't have any reason to think that it's  
7 changed?

8 A. I haven't looked at the question since then, so  
9 I don't know.

10 Q. And you ask -- and this is in this last  
11 paragraph -- "What is it about these two states that  
12 relates the number of multiracial people and health,  
13 education, and income levels?" Right?

14 A. I do.

15 Q. And you say: "Historically, both states were  
16 dominated by a small social economic elite, primarily  
17 made up of white plantation owners. But in Hawaii, this  
18 domination occurred in the late 19th century whereas in  
19 Mississippi, it was already part of the political fabric  
20 when the territory was admitted to statehood in 1817."  
21 Right?

22 A. That's correct.

23 Q. And you continue: "Racism and labor  
24 exploitation existed in Hawaii but they were neither as  
25 extreme nor as embedded as they were in Mississippi

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 48

1 where slavery preceded anti-miscegenation pro laws."

2 Right?

3 A. Correct.

4 Q. And you still agree that the embedded history  
5 of extreme racism and exploitation contribute to  
6 socioeconomic deficits that we see in Mississippi today?

7 A. Yes.

8 Q. And we can put this one away as well. That  
9 one, too. Thanks very much.

10 So let's talk about this case. You  
11 understand that this deposition relates to litigation  
12 brought under Section 2 the of Voting Rights Act?

13 A. I don't know what section of the Voting Rights  
14 Acts it is, but I understand it's a case about voting  
15 rights.

16 Q. Okay. When did you first learn about this  
17 case?

18 A. A year ago.

19 Q. How did you learn about it?

20 A. Mr. Wallace contacted me.

21 Q. Did you and Mr. Wallace know each other  
22 previously?

23 A. No.

24 Q. Just curious. What is your understanding of  
25 the claims brought by the plaintiffs in this case?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 49

1           A. You'd have to be more specific about what it is  
2 you're asking me, because I don't follow the question  
3 exactly.

4           Q. What do you understand the plaintiffs to be  
5 challenging about the Mississippi Supreme Court?

6           A. What they seem to be challenging is the  
7 counties that are within district 1 specifically.

8           Q. What is your understanding about why the  
9 plaintiffs would like district 1 to be configured  
10 differently?

11          A. I believe -- are you asking me specifically  
12 about Dr. Burch's report?

13          Q. I'm asking generally about the claims in the  
14 case. I mean, your reviewed Dr. Campbell's report;  
15 right?

16          A. Yes. I spent more time with Dr. Burch's  
17 report.

18          Q. You reviewed Dr. Cooper's report?

19          A. I did.

20          Q. Excuse me. Mr. Cooper's report?

21          A. Yeah, Mr. Cooper.

22          Q. Wouldn't want to unnecessarily promote  
23 Mr. Cooper.

24                 Having read a few reports in the case -- and  
25 did you read the complaint that was filed in this case

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 50

1 by the plaintiffs?

2 A. Probably, but I don't recall.

3 Q. So I'm just asking you: What's your  
4 understanding of why the plaintiffs think that  
5 district 1 should be redrawn?

6 A. I think it's because they -- the idea is that  
7 there should be a -- either a higher majority or a  
8 straight-out majority of black voters in the district.

9 Q. And what is your understanding of why  
10 plaintiffs think that district should be redrawn so that  
11 there's a higher majority or a straight-out majority of  
12 black voters in district 1?

13 A. I guess it would have to do with some  
14 understanding of how black or white or other people  
15 vote.

16 Q. What's your understanding of what the term  
17 "vote dilution" means?

18 MR. WALLACE: That really is a legal  
19 opinion, and I'll object to it for that reason. He can  
20 answer.

21 Q. You can provide your understanding if you have  
22 one.

23 A. I don't know.

24 Q. What's your understanding of what "racially  
25 polarized voting" means?

Page 51

1           A. My understanding is that white people might  
2 tend to vote in a block, black people might tend to vote  
3 in a block, Chinese people might tend to vote in a  
4 block, Japanese American might tend to vote in a block,  
5 American Indians might tend to vote in a block,  
6 etcetera.

7           Q. And so you would agree that if voting in a  
8 particular area is racially polarized, black voters are  
9 usually not going to be able to elect a candidate they  
10 want to elect unless they form a majority in that area?

11           MR. WALLACE: Object as facts -- object on  
12 the basis based on facts not in evidence. I was trying  
13 to think whether it was bad law or bad facts, but I  
14 object to the form because it's probably both.

15           Q. You can answer the question.

16           A. I don't know the answer to it.

17           Q. Let me ask it again. You would agree based on  
18 your understanding of what racially polarized voting is,  
19 that if you have an area where there is racially  
20 polarized voting, black voters will usually not be able  
21 to elect the candidate that they're voting for unless  
22 they form a majority of the population in that district?

23           A. Well I think what you're asking me is a  
24 research question, so I can't offer an answer off the  
25 top of my head without actually researching some

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 52

1 specific condition.

2 Q. Let me ask it one other way. If white voters  
3 are usually voting for one candidate and black voters  
4 are usually voting for the other candidate and both  
5 white and black voters are voting cohesively, then in an  
6 area where voters are supposed to be either white or  
7 black, where black voters are the minority, they're  
8 usually going to lose the election?

9 MS. WALLACE: Object to the form of the  
10 question as seeking legal opinion on the meaning of both  
11 "usually" and "cohesively." But you may answer.

12 A. I don't know.

13 Q. You understand you're being proffered as an  
14 expert in this case?

15 A. I understand that.

16 Q. What are you an expert in?

17 A. Demography.

18 Q. You're not an expert electoral mapping drawing?

19 A. That's correct.

20 Q. And you're not an expert in voting behavior?

21 A. That's correct.

22 Q. Do you know what the duties of an expert in a  
23 federal law suit are?

24 MR. WALLACE: Well, I'm going to object to  
25 the form of that as being a legal opinion. But he may

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 53

1 answer.

2 A. Does it vary by judge or court?

3 Q. Well let me ask it this way: Do you think that  
4 an expert is supposed to be objective?

5 A. That I believe. I think an expert should be  
6 objective.

7 Q. And when did you first learn you were going to  
8 give a deposition in this case?

9 A. Not too long ago. Mr. Wallace might be able to  
10 give an answer on that one. I can't recall.

11 Q. Unfortunately, I'm not deposing Mr. Wallace.

12 A. Well, I -- a month ago? A week ago? I don't  
13 recall. Certainly wasn't a year ago.

14 Q. And without going into the substance of any  
15 conversations that you had with your attorneys, what did  
16 you do to prepare for today's deposition?

17 A. I went back and reviewed the surrebuttal report  
18 I prepared.

19 Q. How long did you spend preparing for today's  
20 deposition?

21 A. Since I knew about being deposed, probably  
22 several hours.

23 Q. Did you meet with anyone?

24 A. Other than Mr. Wallace?

25 Q. Other than Mr. Wallace.

Page 54

1 A. No.

2 Q. You met with Mr. Wallace?

3 A. Yes.

4 Q. Again without asking you about the substance of  
5 any conversations you had, about how many times did you  
6 meet with Mr. Wallace?

7 A. This morning, yesterday.

8 Q. Did you review any documents -- and I'm sorry,  
9 was that your complete answer, was this morning and  
10 yesterday?

11 A. I believe so. We maybe talked on the phone or  
12 e-mail, but I can't recall that. But in terms of  
13 personally talking to him about it.

14 Q. Did you review any documents to prepare for  
15 this deposition?

16 A. You asked me that question.

17 Q. And you mentioned your surrebuttal. Anything  
18 else that you reviewed?

19 A. Not that I really read or reviewed.

20 Q. Did you take any notes during any of the  
21 meetings or known calls that you had to prepare for this  
22 deposition?

23 A. No.

24 Q. Did you take any notes when you were reviewing  
25 documents to prepare the for deposition?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 55

1           A. Not that I recall.

2           Q. Did you do any highlighting or margin note  
3 writing in any documents as you prepared for this  
4 deposition?

5           A. I generally don't review printed documents  
6 because the printer at my house doesn't work, well --  
7 I'm serious. So what I generally do is look at things  
8 on-line.

9           Q. And you didn't make any marginal notes in any  
10 digital documents you were reviewing?

11          A. No.

12          Q. I'm also in the faulty printer club, so I feel  
13 your pain on that one.

14           Did you bring any documents with you to  
15 today's deposition.

16          A. No.

17          Q. Okay. I'd like to spend some time talking  
18 about the January report that we've been looking at  
19 starting with the demographic analysis that you  
20 conducted.

21           MR. WALLACE: Well at this point, I'm going  
22 to state our position -- and it depends on what you're  
23 looking at. The court order authorizes you to examine  
24 him on the surrebuttal report. I don't doubt that there  
25 are some things in the first report which may be

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 56

1 inextricably connected to the second report, so, you  
2 know, I'll take it up an issue at a time. But we do  
3 believe this is a deposition on the surrebuttal report.  
4 And with that, you may proceed.

5 MR. SAVITZKY: Thank you, Mr. Wallace. And,  
6 you know, we understand your position. Obviously, this  
7 came up at the last deposition as well. And, you know,  
8 we disagree and think this is our opportunity to take a  
9 deposition of defendant's experts, but we can hash that  
10 out another time, and your object is certainly noted.

11 BY MR. SAVITZKY:

12 Q. So with that, still looking at your January  
13 report you should have in front of you, and it's marked  
14 as Exhibit 2, I just wanted to get one point out of the  
15 way. You say a few times in your report, paragraph 13,  
16 for example, that Mr. Cooper argues -- "argues that  
17 Mississippi's Supreme Court district 1 is a minority  
18 black district at 49.3 percent." You can look at  
19 paragraph 13 of your report to confirm that you say  
20 this. It is, I believe, the second full sentence. You  
21 characterize Mr. Cooper as arguing that district 1 is a  
22 minority black district at 49.3 percent?

23 A. I do. I write that in here.

24 Q. And you actually at paragraph 33, you say it  
25 again, you say: "Plaintiffs are relying on the any part

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 57

1 black voting age population of the district to  
2 characterize district 1 as being minority black."

3 A. Yes.

4 Q. And in paragraph 39 you say -- you  
5 characterize: "The claim that plaintiffs are making is  
6 that district 1 'is a minority district' in need of  
7 remediation."

8 A. Yes.

9 Q. Did you read Mr. Cooper's October report?

10 A. I did.

11 Q. Did you review the exhibits to the report?

12 A. I did.

13 MR. SAVITZKY: So I just want to mark the  
14 October report now. This'll be Exhibit 9. Here's a  
15 copy. One for Mr. Wallace.

16 BY MR. SAVITZKY:

17 Q. And just looking at page 19 of Cooper's October  
18 report, just at the very top of the page, let me know  
19 when you're there.

20 A. I'm there.

21 Q. He says: "District 1 is only a 4 percentage  
22 point plurality BVAP district; right?

23 A. Yes, it does say that.

24 Q. And that is the statement that you're pointing  
25 to when you say that Cooper argues that Mississippi

Page 58

1 Supreme Court district 1 is a minority black district?

2 MR. WALLACE: That's that first question  
3 you've asked him since I stated my objections, and I  
4 object to it as being outside the scope of the order.  
5 He may answer.

6 A. Yes.

7 Q. So what Mr. Cooper says he doesn't say  
8 minority, he says plurality; he says it's plurality  
9 black district; right?

10 A. He says that.

11 Q. So you think that paragraph 13 and those other  
12 references in your report should be corrected?

13 A. But 49.29 percent is not a majority.

14 Q. Right. But Mr. Cooper doesn't characterize it  
15 as a minority black district, he characterizes it at a  
16 plurality black district; right?

17 A. You're correct.

18 Q. But you say Mr. Cooper "argues that Mississippi  
19 Supreme Court district 1 is a minority black district at  
20 49.3 percent?

21 A. I did.

22 Q. He doesn't argue that, does he?

23 A. That would be up to you. When someone says  
24 it's 49.29 percent, that to me is a statement that's a  
25 minority.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 59

1 Q. Are a minority and a plurality the same thing?

2 A. A minority is when you're less than half,  
3 depending on what the situation is. And to me, that's a  
4 minority.

5 Q. A plurality would imply that you're the --  
6 well, strike that. We'll leave it there.

7 You don't dispute that the voting age  
8 population based on the census is the traditional  
9 standard for measuring population for purposes of  
10 drawing an electoral map?

11 MR. WALLACE: Objection as asking for a  
12 legal opinion. He may answer.

13 A. I believe that's the case.

14 Q. And then you look at American Community Survey  
15 data as well to analyze the demographics of the  
16 population in Mississippi in your report; right?

17 A. Yes.

18 Q. And, I mean, we can, I think, starting at  
19 paragraph 39 of your report, if you'd like a place to  
20 look, but -- and you -- strike that.

21 Unlike data from the census, the America  
22 Community Survey is an estimate; right?

23 A. It is. It's a sample-based estimate.

24 Q. Did you use the 2016, 2020 special tabulation  
25 of the ACS?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 60

1           A. I believe that's the case. I'd have to look at  
2 the actual report to see what I used, but that's the  
3 most likely one.

4           Q. And you say that using ACS estimates of CVAP or  
5 citizens voting age population, the existing district 1  
6 is majority black CVAP; right?

7           A. I believe that's the case. Can you point me to  
8 the paragraph so I can see it?

9           Q. Yeah. I believe it's on paragraph 39.

10          A. Yes.

11          Q. Do you think that the existing district 1 is  
12 reasonably configured?

13           MR. WALLACE: Objection as calling for a  
14 legal conclusion, but he may answer.

15          A. I don't know. And the sense of configured, in  
16 what manner? Geographically? Socially? Spacially?  
17 Road-wise? Communication?

18          Q. Is existing district 1 compact?

19          A. I'd have to look at the data to, again, recall  
20 if that's the case.

21          Q. Did you analyze the compactness and other  
22 metrics of district 1 in conducting your opinions in  
23 your January report?

24          A. I haven't looked at this report for quite a  
25 while that you're bringing up, so I'd have to go back

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 61

1 and review it. I didn't review it prior to this  
2 deposition.

3 Q. And you don't conclude anywhere in your report  
4 that the black population of Mississippi is not  
5 sufficiently numerous and geographically compact to  
6 allow for one black majority supreme court district?

7 A. Again, I'd have to stress I'd have to go back  
8 and look at the report because I haven't looked at it or  
9 thought about it in a while.

10 Q. I mean, you're welcome to review the  
11 conclusions if you want or --

12 A. If you want me to now, I can.

13 Q. The question is whether you concluded anywhere  
14 that the black population in Mississippi is not  
15 sufficiently numerous and geographically compact to  
16 support one majority black supreme court district?

17 MR. WALLACE: Object to the form because  
18 sufficiently numerous geographically compact requires  
19 all kinds of legal conclusions.

20 A. And my answer, again, is I'd have to go back  
21 and review all those since I -- I didn't do that prior  
22 to this deposition.

23 Q. You don't conclude that it's not possible to  
24 draw a compact majority black supreme court district in  
25 Mississippi?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 62

1                   MR. WALLACE: Same. Objection be my answer.

2                   A. I don't have a conclusion about that at this  
3 point in time because it's not in my head.

4                   Q. But you don't conclude that in your report  
5 anywhere?

6                   A. I'd have to look back at the report to review  
7 it. I don't know. As I said, I haven't looked at this  
8 report for quite a while, so I can't recall exactly  
9 what's in it.

10                  Q. So when calculating demographics of the  
11 different districts, you also do some analysis to adjust  
12 for prison population. Do you recall that?

13                  A. I do.

14                  Q. And that's starting at paragraph 46 of your  
15 report. And you conduct this analysis by subtracting  
16 the current populations of some of Mississippi's prisons  
17 from the CVAP that you've calculated; right?

18                  A. I believe that's the case, but I'd have to look  
19 specifically again at it to recall because I don't  
20 recall off the top of my head.

21                  Q. Well, feel free to refresh yourself by looking  
22 at paragraph 46 and neighboring paragraphs if you need  
23 to before we proceed. And let me know when you're  
24 ready.

25                  A. I've looked at it.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 63

1           Q. Okay. So you do this analysis of prison  
2 populations by subtracting the current populations of  
3 some of Mississippi's prison facilities from the CVAP  
4 that you've calculated; right?

5           A. Yes.

6           Q. And specifically, you look at the three largest  
7 prison facilities in the state of Mississippi; right?

8           A. I believe those are the three largest, yes.

9           Q. And you calculate the current population of  
10 those three facilities that we looked at as 7,000  
11 people?

12          A. Can you point to me where the -- where I've got  
13 the number in there?

14          Q. Yeah. I'm looking at Table III E-1 on page 25.

15          A. And then what you're looking at is the right  
16 hand total where it has 2,996 in private prisons and  
17 4,050 in regional correction facilities to say it's  
18 approximately 7,000?

19          Q. So that's right.

20          A. That's correct.

21          Q. And just to be clear, the count that you have  
22 here is a partial count of the population of  
23 incarcerated persons in Mississippi, right, you didn't  
24 include every incarcerated person?

25          A. Such as in county jails and the like?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 64

1 Q. Sure.

2 A. That's correct.

3 Q. And your analysis shows that there is a  
4 higher -- and I'm quoting you know according to  
5 paragraph 48, you say: "There's a higher proportionate  
6 number of black prisoners in the three major prisons in  
7 Mississippi than white prisoners overall and by gender."  
8 Right?

9 A. Yes.

10 Q. And that table that we were looking at, Table  
11 III E-1 indicates that black Mississippians are about  
12 60 percent of the prison population even though they are  
13 more like 36 percent of the voting age population?

14 A. That's an accurate characterization.

15 Q. And you know that in Mississippi, people with a  
16 qualifying felony are disenfranchised for life not  
17 merely when they are incarcerated?

18 A. I knew they were disenfranchised, I did not  
19 necessarily know it was for life, but I suspect I think  
20 I somehow knew that, yeah.

21 Q. And you don't try to estimate the number of  
22 persons who are unable to vote, who are disqualified  
23 from voting because of a qualifying felony conviction  
24 but who are no longer incarcerated; right?

25 A. That's correct.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 65

1 Q. And you say, I think, on paragraph 36:  
2 "There's no practical way to measure or locate these  
3 demographically by district in a meaningful way."

4 A. That's correct. I stated that.

5 Q. Did you review Mr. Cooper's rebuttal report  
6 from February of 2023?

7 A. I believe I did, but I'd have to look at his  
8 report again to refresh my memory.

9 MR. SAVITZKY: And we can mark that as well.  
10 And we're on Exhibit 10. Here you are. And  
11 Mr. Wallace. Okay.

12 BY MR. SAVITZKY:

13 Q. And looking at page 5 of this rebuttal report,  
14 paragraph 9, Mr. Cooper discusses the study showing that  
15 the total disenfranchised population based on qualifying  
16 felony convictions in Mississippi that were rendered  
17 between 1994 and 2017 is 56,000. Do you see that?

18 A. I do.

19 Q. And do you have any reason to dispute that?

20 MR. WALLACE: Now I will object as being  
21 outside of the scope of the court order, but he may  
22 answer.

23 Q. Do you have any reason to dispute that?

24 A. The only thing I question is, are they all in  
25 Mississippi.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 66

1           Q. Otherwise, you have no reason to dispute that's  
2 an accurate assessment of the number --

3           A. I have no reason to dispute that's an accurate  
4 assessment.

5           Q. And looking at the next paragraph, Mr. Cooper  
6 says -- and sorry, one other point here before I move  
7 on. Mr. Cooper says that of that 56,000, black  
8 Mississippians account for over 60 percent of that  
9 number?

10           MR. WALLACE: Same objection. He may  
11 answer.

12           Q. Any reason to dispute that?

13           A. Again, I'd have to go look at the exact data  
14 that he pulled or other sources to answer it fully, but  
15 I have no reason at this point to dispute it.

16           Q. It's actually quite consistent with the number  
17 that you found, isn't it?

18           A. It is.

19           Q. And that 56,000 represents convictions from the  
20 23 year period 1994 to 2017?

21           A. I believe that's correct.

22           Q. And so Mr. Cooper then says in the next  
23 paragraph, paragraph 10 on page 6 in his rebuttal  
24 report: "It's clearly within the realm of possibility  
25 that after factoring in felony convictions going back to

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 67

1 1948, two additional 23-year periods, the adjusted  
2 eligible black CVAP for voters in district 1 may drop  
3 below 50 percent." Do you dispute that that's within  
4 the realm of possibility?

5 MR. WALLACE: Same objection. He may  
6 answer.

7 A. Many things are in the realm of possibly. But  
8 again, the question is how many people may have migrated  
9 out of Mississippi or died.

10 Q. So --

11 A. All those numbers.

12 Q. So you agree that it's possible that 51 percent  
13 CVAP once you adjust for all the persons who may have a  
14 qualifying felony conviction, it could be under 50  
15 percent?

16 MR. WALLACE: Same objection. He may  
17 answer.

18 A. It could be either way depending on if they're  
19 still alive or where they live.

20 Q. So that's a yes, it could be under 50 percent  
21 prison adjusted CVAP?

22 A. That is a yes but it's qualified with the  
23 follow-up study as I mentioned earlier, to follow up on  
24 people who are in prison, discover where they're living  
25 now, are they in Mississippi or out of Mississippi, are

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 68

1       they alive? Are they dead? That may affect the answer.

2           Q. You would agree that people -- that there are  
3 likely people who were convicted of a qualifying felony  
4 in 1960, 1970, still alive today?

5           MR. WALLACE: Same objection. He may  
6 answer.

7           A. Yeah, that's -- that's a possibility, yeah.  
8 It's also a possibility that people from other states  
9 may have moved there, there are a lot of possibilities.  
10 This is a research question, as I stress.

11          Q. Understood. So just briefly, I want to look at  
12 a different part of your demographic analysis. I want  
13 to turn back to paragraph 34 of your report. You  
14 mention -- well, let me just read it. You say: "A  
15 useful way to look at the distribution of WNH" -- white  
16 non Hispanic -- "total and any part black total  
17 population across the three districts is to use the  
18 coefficient of variation." Do I have that right?

19          A. You do.

20          Q. And the coefficient of variation is the  
21 standard deviation of the voting age population of the  
22 three districts divided by the total voting age  
23 population?

24          A. Not the total, the mean.

25          Q. Divided by the mean?

Page 69

1           A. That's correct.

2           Q. And you say: "The coefficient of variation  
3 shows the extent of variation relative to the mean."

4           A. It's normalized. That's what the term is,  
5 because you could have one population that has a really  
6 high mean if you're comparing it to another population  
7 that has a low mean. And what you want to do is divide  
8 the means into the standard deviation so you get a  
9 relative basis for comparison.

10          Q. And you say you do this for total but also  
11 white VAP, black VAP, and you say: "This shows that  
12 white total is four times higher than that same per VAP  
13 and black total is five times -- approximately five  
14 times higher than that same VAP which serves to confirm  
15 that white total and black total population are less  
16 equally distributed across the three districts in total  
17 VAP."

18          A. And remind me what paragraph --

19           MR. WALLACE: Which paragraph are we in?

20           MR. SAVITZKY: Paragraph 34.

21           MR. WALLACE: 34?

22           MR. SAVITZKY: Last sentence.

23 BY MR. SAVITZKY:

24          Q. You say looking at the data in this manner  
25 confirms that: "White non Hispanic total and any part

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 70

1 black total population are less equally distributed  
2 across the two districts than the total voting age  
3 population." Right?

4 A. That's correct.

5 Q. Is that another way of saying that black and  
6 white populations are not evenly distributed across  
7 Mississippi geography?

8 A. It would be.

9 Q. And you would agree that large numbers of high  
10 black VAP population are generally distributed north and  
11 south along the Mississippi River in Mississippi?

12 MR. WALLACE: Now I'm going to object to  
13 that for the same objection. He may answer.

14 A. I -- if you're asking me what my -- I would  
15 call it a research of hypothesis. It's a good question  
16 to ask as a starting point, but it's something you'd  
17 have to investigate.

18 Q. And let's just briefly -- let's put a pin in  
19 this page, but turn to page 96 -- excuse me, not page  
20 96, paragraph 96 of your report on page 49. And just --  
21 the second sentence of that paragraph, just take a look  
22 at that and let me know when you're ready.

23 A. And it's paragraph 99?

24 Q. Paragraph 96, second sentence. Just take a  
25 look and let me know when you're ready .

## White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 71

1 (Witness reviewing exhibit.)

2 A. Yes.

Q. You would agree that large numbers -- "Large numbers of high percent any part black VAP population are generally distributed north and south along the Mississippi River; right?

7 A. Yes.

8           Q. Now having worked in Mississippi, studied  
9 Mississippi demographics, you sort of know that's true  
10 just from looking at the map and knowing the population,  
11 there's a substantial amount of black population  
12 concentrated in the Mississippi Delta and the capital  
13 region; right?

16 A. Yes.

17 Q. And that's why it's not especially difficult to  
18 draw majority black supreme court districts and include  
19 the Mississippi Delta and the capitol regions?

20 MR. WALLACE: Same objection plus the  
21 objection that is asking for a legal conclusion. But he  
22 may answer.

23           A. I don't draw a congressional district, so I'm  
24 not in a position to really answer that question.

Q. And you don't draw supreme court districts,

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 72

1 either?

2 A. Yeah, that's correct.

3 Q. So let's talk about the traditional districting  
4 principles. And we're now in a section of your report  
5 starting at paragraph 56, page 29. Are you familiar  
6 with the principles that electoral map drawers consider  
7 in drawing an electoral map?

8 A. Somewhat.

9 MR. WALLACE: Objection as to form as not  
10 explaining what an electoral map drawer is.

11 Q. Do you understand that an electoral map drawer  
12 is a person who draws electoral maps?

13 A. I do.

14 MR. WALLACE: With political authority or  
15 sitting in his basement with a pad? Can you be more  
16 specific.

17 Q. So you rely in your report on a few different  
18 sources to discern the principles that a person drawing  
19 an electoral map would consider; right?

20 A. Yes.

21 Q. One of the sources you rely on is a report from  
22 the congressional research service, it discusses  
23 principles for congressional redistricting?

24 A. I believe that's the case, yes.

25 MR. SAVITZKY: And we'll just mark that. We

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 73

1 are on Exhibit 11. Copy for you. Copy for Mr. Wallace.

2 BY MR. SAVITZKY:

3 Q. This is the report that you cite in your  
4 January report? Just confirming, this is the report  
5 that you looked at.

6 A. Give me a second here. I'm still trying to  
7 organize the main report you were going through --

8 Q. Sure, sure.

9 A. -- so I can find things when we go back to it  
10 again.

11 Q. And that's why, because we will certainly go  
12 back here.

13 And this congressional research service  
14 report is one of the sources that you relied on in your  
15 January report too?

16 A. It is.

17 Q. And according to this report, and we can see on  
18 page 3, page 3 of the document there -- the pagination  
19 is at the bottom. That's front matter. There we go.  
20 And just looking there, the report lists some of the  
21 principles that map -- electoral map drawers consider;  
22 right?

23 A. It does.

24 Q. And according to this source that you relied  
25 on, those principles include assuring population

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 74

1 equality among districts within the same state. You  
2 agree that's one of the principles to be considered?

3 A. That's one of the principles listed.

4 Q. You agree that's one of the principles listed  
5 as traditional criteria for drawing electoral maps?

6 A. That's what it says here, yes.

7 Q. And another one that's listed is protecting  
8 racial and language minorities from vote dilution while  
9 at the same time not promoting racial segregation?

10 A. Yes.

11 Q. And another principle is promoting geographic  
12 compactness and contiguity when drawing districts?

13 A. Yes, sir.

14 Q. And another principle is minimizing the number  
15 of split political subdivisions and communities of  
16 interests within districts?

17 A. Yes.

18 Q. And another principle is preserving historic  
19 stability in the cores of previous districts?

20 A. Yes.

21 Q. And then looking at this list, the list  
22 indicates that some of the considerations are more  
23 widely adopted than others; right?

24 A. In terms of?

25 Q. How many states require them, how many states

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 75

1 have adopted them, there are little parentheticals after  
2 each one that say how many states consider --

3 A. Yes, there's a different number of states  
4 listed after some of these.

5 Q. So contiguity appears to be expressly embraced  
6 as a required consideration by 22 states but core  
7 retention by only 7?

8 A. Correct.

9 Q. So when it's discussed in paragraph 58 and 59  
10 of your January report, you also relied -- and we can  
11 put this one to the side, but we may refer back to it  
12 again. You also relied on another multistate survey of  
13 traditional districting principles from the National  
14 Conference of State Legislators; right?

15 A. Point me to that paragraph where I state that,  
16 please?

17 Q. Sure. This is Footnote 21 on paragraph 58,  
18 says: "The National Conference of State Legislatures is  
19 widely recognized, the nation's independence objective  
20 and bipartisan authority of redistricting matters  
21 published a series of principles that reflect  
22 traditional districting principles that have both  
23 informed -- that have been both informed by and adopted  
24 by many states." You cite the report in the footnote,  
25 continue on, and you say: "This guidance from the NCSL

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 76

1 is the basis of any assessment I make as an expert of  
2 individual states or organizations, criteria, and  
3 redistricting principles." Right?

4 A. Yes.

5 Q. So this NCSL guidance is the basis for your  
6 assessment of the compliance of an electoral map with  
7 traditional districting principles?

8 A. I use it as a guideline.

9 Q. A guideline to assess compliance with  
10 traditional districting principles?

11 A. I use it as what's considered to use such as  
12 core, retention, and so on, yes.

13 MR. SAVITZKY: And we can just mark that  
14 next, Exhibit 12. Copy, copy. Okay.

15 BY MR. SAVITZKY:

16 Q. And just looking at the list of considerations  
17 discussed right on this first page and then the bullets,  
18 seems like a similar list of criteria to the one that we  
19 just discussed; right?

20 A. It does.

21 Q. And so looking at right up on the first page,  
22 we see the second paragraph, first sentence: "All  
23 states must comply with the federal constitutional  
24 requirements related to population and  
25 antidiscrimination." Right?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 77

1           A. I see that.

2           Q. And then we say -- or we see: "In addition to  
3 population equality, Section 2 of the Voting Rights Act  
4 prohibits plans to intentionally or inadvertently  
5 discriminate on the basis of race which would dilute  
6 that minority vote."

7           A. I see that.

8           Q. So then you agree those are considerations that  
9 should be guidelines in assessing compliance of a map  
10 with traditional districting principles?

11           MR. WALLACE: Objection. Again is asking  
12 for a legal opinion. But he can respond.

13           A. My -- my answer is: I use these as guidelines.

14           Q. You use them as guidelines in forming any  
15 opinions that you form about the compliance of the plans  
16 offered in this case with traditional districting  
17 principles?

18           A. Yes.

19           Q. And the NCSL report then says: "Well beyond  
20 that, states are allowed to adopt their own  
21 redistricting criteria or principles for drawing plans;  
22 right?

23           A. Yes.

24           Q. And then at paragraph 59 of your report -- I  
25 think paragraph 59 of your report is basically a

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 78

1 verbatim recitation of the bottom of this first page of  
2 the NCSL report?

3 A. I believe it -- that's where I found the  
4 materials so that's cited in there. Is that the case?

5 Q. Yeah. It's -- it's certainly cited in the  
6 footnote so I'm not trying to play gotcha. I just want  
7 to make sure this is basically what, you know, what you  
8 have done here in your report you say the traditional  
9 redistricting principles that have been adopted by many  
10 states, and then you list --

11 A. Yes.

12 Q. -- the principles and the descriptions thereof  
13 from the NCSL report?

14 A. Yes.

15 Q. And those include compactness?

16 A. Yes.

17 Q. And they include contiguity?

18 A. Yes.

19 Q. An include preservation of counties in  
20 political subdivisions?

21 A. Yes.

22 Q. They include preservation of communities of  
23 interest?

24 A. Yes.

25 Q. And they include maintaining the cores of prior

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 79

1 districts to the extent possible?

2 A. Yes.

3 Q. And they include avoiding incumbent pairings?

4 A. Yes.

5 Q. And then the NCSL report goes on to indicate  
6 that different states have adopted sort of different  
7 subsets of these criteria; right?

8 A. Yes. I believe that's the case.

9 Q. And we can look at page 10 of this document.

10 MR. WALLACE: In Exhibit 12?

11 MR. SAVITZKY: Correct.

12 MR. WALLACE: Okay.

13 Q. And we can see Mississippi is included there.  
14 And just looking at the NCSL description of the criteria  
15 adopted for redistricting of Mississippi, core retention  
16 is not one of the criteria that the NCSL report that you  
17 relied on identifies as being adopted in Mississippi;  
18 right?

19 A. We're in Exhibit 12; correct?

20 Q. Yes, page 10.

21 A. Thank you. And your question was?

22 Q. My question is: Core retention is not one of  
23 the criteria that the NCSL report that you relied on  
24 says that Mississippi has adopted for redistricting?

25 A. What I read here is require compact contiguous,

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 80

1 preserve political subdivision, preserve communities of  
2 interest.

3 Q. And core retention is not one of the criteria  
4 that Mississippi has adopted according to the NCSL  
5 report that you rely on?

6 A. That would be correct.

7 Q. And now looking at paragraph 60 of your  
8 report -- and I think it's possible we'll rely on this  
9 again, but we can put the NCSL report up for now.

10 Looking at paragraph 60 of your report, you  
11 say: "Mississippi code Section 53101," which also cited  
12 in the NCSL report, "expressly identified a few criteria  
13 for legislative districts." Right?

14 A. Yes.

15 Q. And in your report, you summarized the statute  
16 is requiring the districts be compact, contiguous, and  
17 preserve political subdivisions; right?

18 A. Yes.

19 MR. WALLACE: Object to the form as saying  
20 "districts." It actually says "legislature districts."  
21 But he may answer.

22 Q. And just looking at the language that you quote  
23 in the block vote right below paragraph 60, would you  
24 agree it's a pretty strong emphasis on county lines in  
25 that language?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 81

1                   MR. WALLACE: Object to the form. But he  
2 can answer if he can.

3                   A. It reads: "Districts shall be structured as  
4 far as possible and within constitutional standards  
5 along county lines."

6                   THE REPORTER: Sir, if you slow down,  
7 please.

8                   A. It reads: 60B, districts shall be structured  
9 as far as possible and within constitutional standards  
10 along county lines, if county lines are fractured, then  
11 election district lines shall be followed as nearly as  
12 possible."

13                  Q. So this statute that you point to places the  
14 emphasis on following county lines?

15                  A. That's how I would read that.

16                  Q. And you also in the last sentence of paragraph  
17 60 which is the top of page 31, you also identify  
18 communities of interest, preserving communities of  
19 interest as a relevant consideration in drawing  
20 districts in Mississippi.

21                  A. Yes.

22                  Q. And again just looking at that statute you  
23 block quote there, core retention is not mentioned in  
24 Mississippi's statute as one of the districting criteria  
25 in Mississippi?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 82

1           A. Correct.

2           Q. And you would agree that in considering the  
3 different traditional districting principles drawing a  
4 map, and electoral map drawer is going to have to  
5 balance some of these different principles and  
6 considerations?

7           MR. WALLACE: Object to form once again for  
8 failure to identify electoral map drawer and asking for  
9 legal conclusions. But you may -- and also being  
10 waylaid under the court order. But subject to all those  
11 objections, he may answer.

12          A. That would appear to be the case to me.

13          Q. Sometimes if you're putting a map -- an  
14 electoral map together, you're going to have to make  
15 tradeoffs between these different principles.

16          A. You have to make tradeoffs in anything we do in  
17 life, correct.

18          Q. Including these principles, which --

19          A. Since it's such a generalized idea, I think  
20 that you'd have to do that with these principles.

21          Q. And would you agree that different map drawers  
22 could employ different approaches, make different  
23 tradeoffs and each draw a map that in the end is  
24 consistent with the set of principles we've been talking  
25 about?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 83

1                   MR. WALLACE: Same objection as the last  
2 one. He may answer.

3                   A. In principle, that could happen.

4                   Q. So let's talk about the different criteria that  
5 we've been discussing one by one starting with  
6 population equality. Why do you think population  
7 equality, in your understanding, is an important  
8 consideration in drawing an electoral map?

9                   MR. WALLACE: Same objections. He may  
10 answer.

11                  A. Well as one example, if you had 500 people in  
12 an area, you don't want to put 499 of them in one and 1  
13 person in the other and then equal -- have some sort of  
14 equal representation, whatever government form it would  
15 be.

16                  Q. Ever heard the expression one person, one vote  
17 before?

18                  A. I have.

19                  Q. Population equality implements that principle;  
20 is that right?

21                  A. I believe so.

22                  Q. And looking at Table III.D.1 on page 17 of your  
23 report -- let me know when you're there?

24                  A. I'm sorry.

25                  Q. You report the population of the existing

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 84

1 supreme court districts, these are the current districts  
2 in Mississippi, right, the VAP. Do you see that?

3 A. I do. I wouldn't say a report, the population  
4 per se. These are subsets of the population in  
5 Mississippi.

6 Q. Well you report the VAP in that first column  
7 for each --

8 A. That's correct.

9 Q. -- of the three districts, the voting age  
10 population. And you say in a footnote, Footnote 14 that  
11 your numbers correspond to the numbers in Mr. Cooper's  
12 report with respect to the demographics of the  
13 districts?

14 A. I do.

15 Q. And just generally, you don't anywhere indicate  
16 that there's any discrepancy between the numbers that  
17 Mr. Cooper reports based on the census and the numbers  
18 that you report based on the census?

19 A. I'd have to look through the full report, but I  
20 believe that's the case.

21 Q. Now, you don't report population deviations for  
22 each of these districts; right?

23 A. In the sense of?

24 Q. You don't report how different the VAP of each  
25 district is from the ideal population size or mean

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 85

1 population size for all the districts?

2 MR. WALLACE: Objection. Comparing VAP to  
3 mean total population size or some other mean population  
4 size?

5 Q. The VAP of the district to -- to mean or ideal  
6 VAP of the district.

7 MR. WALLACE: All right. Objection as to --  
8 as based on a faulty legal theory. I don't think  
9 there's a requirement for equality in VAP. But go  
10 ahead, he may answer.

11 A. In -- so I'm not sure what you're getting at,  
12 but in one sense, comparing deviations in the sense of  
13 how much a number may vary from a mean across a number  
14 of categories or districts, that's what your asking?

15 MR. SAVITZKY: You know what, I'll strike  
16 that. Mr. Wallace makes a good point.

17 BY MR. SAVITZKY:

18 Q. You don't report population deviations to the  
19 districts in terms of total population from the ideal  
20 districts size?

21 A. Well, I'm not sure what the ideal district size  
22 is. I mean in that sense, are you talking about a mean  
23 or an average taken across a number of units?

24 Q. If there were equally populated districts, you  
25 don't report the deviation of these districts from the

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 86

1 size of what an -- what an equally divided --

2 A. Thank you for clarifying that. Yeah, I  
3 understand. No, I don't.

4 Q. You would agree that looking at that population  
5 deviation is something that map drawers take into  
6 account to asses that equal population principle that  
7 we've been talking about?

8 MR. WALLACE: Same objection as before. He  
9 may answer.

10 A. I -- it may depend on the situation.

11 Q. And we talked about that book that you -- that  
12 Mr. Bryan and Mr. Morrison had written called  
13 Redistricting, do you recall that?

14 A. Yes, I do.

15 Q. Is that another source that you relied on to  
16 think about the different principles that mappers  
17 consider?

18 A. I probably have looked through the book, again,  
19 when I was looking at this, but I don't recall  
20 specifically if I did.

21 Q. And let's just mark that. So this is  
22 Exhibit 13, Redistricting, a Manual for Analysts,  
23 Practitioners, Citizens, published as we discussed  
24 earlier by Springer.

25 MR. WALLACE: This is exhibit which?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 87

1 MR. SAVITZKY: 13.

2 MR. WALLACE: 13.

3 BY MR. SAVITZKY:

4 Q. Okay. And I just want to turn to page 47 of  
5 this document here. And you let me know when you're  
6 ready.

7 A. I'm there.

8 Q. And we see on page 47 that the authors list  
9 some of the same criteria that we've been talking about;  
10 right?

11 A. I do.

12 Q. And they say: "Substantial equality of  
13 population has come to mean that the population  
14 difference between the largest and smallest districts,  
15 the total deviation may not exceed 10 percent of the  
16 average district population." Do you see that?

17 A. Yes.

18 Q. Do you agree with Mr. Morrison and Mr. Bryan  
19 that for purposes of drawing an electoral map,  
20 substantial quality of population means trying to stay  
21 within a plus or minus 5 percent of the ideal of average  
22 district size?

23 MR. WALLACE: Objection as to asking for a  
24 legal conclusion and for being outside the scope of the  
25 court order. But he may answer.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 88

1           A. I look at this as another guideline.

2           Q. You agree it's a reasonable approach to  
3 implementing the consideration of equal population?

4           A. Well, it seems to be an approach to doing it,  
5 yes.

6           Q. And by the way, the next one that Mr. Bryan and  
7 Mr. Morrison mention is minority representation?

8           A. I see that.

9           Q. Okay. So looking back at your Table III.D.1 on  
10 page 17 of your report -- and I understand this is only  
11 VAP -- it does look like, at least looking at VAP for  
12 now --

13           A. And where was that again?

14           Q. This is on page 17 of your report.

15           A. Thank you.

16           Q. And just looking at VAP, it looks like  
17 district 2, almost 800,000 people district 1, 715,000.  
18 So there's a significant difference in total voting age  
19 population; right?

20           A. I read that district 1 as being 7,000 --  
21 716,000, not 715,000.

22           Q. Right. So -- but there's a significant about  
23 80,000 person delta between the size of those two  
24 districts in terms of VAP?

25           A. There's a difference of approximately 80,000

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 89

1 people.

2 Q. And looking at Mr. Cooper's October report  
3 which is Exhibit 9, if we could pull that back out.  
4 Here it is. So looking over at Mr. Cooper's October  
5 report --

6 A. Thank you.

7 Q. -- page 19, Figure 8, let me know when you're  
8 there.

9 A. I'm there.

10 Q. So Mr. Cooper does report total population in  
11 these districts in Figure 8; right?

12 A. Yes.

13 Q. And Mr. Cooper also reports the percent  
14 deviation from the ideal district size or mean district  
15 size or mean district size; right?

16 A. If he calculated it, that would be the case.

17 Q. And you don't dispute that looking at  
18 Mr. Cooper's Figure 8, the population deviation under  
19 the current scheme of supreme court districts is greater  
20 than plus or minus 5 percent?

21 MR. WALLACE: All right. Same objections as  
22 before. Asking for a legal conclusion, not authorized  
23 by the court order, and in addition, not relevant to any  
24 issue raised in the complaint. But he may answer.

25 A. The -- there's one deviation that's minus 5.39

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 90

1 percent, and one -- another one that's plus 5.07  
2 percent.

3 Q. So then the population deviation range for the  
4 existing supreme court district plan is greater than  
5 plus or minus 5 percent?

6 MR. WALLACE: Same series of objections. He  
7 may answer.

8 A. Slightly greater than plus or minus 5 percent.

9 Q. And that's sort of made sense when you consider  
10 these districts haven't been changed since 1987?

11 MR. WALLACE: Same series of objections. He  
12 may answer.

13 A. I'm not equipped to answer other than looking  
14 at what the population history is over the same period  
15 of time.

16 Q. And you reviewed Mr. Cooper's October report?

17 A. Yes.

18 Q. You reviewed the population statistics that he  
19 provided for the illustrative plans?

20 A. Yes. And again, as I stressed, I haven't  
21 looked at those in a long time, so I'm not going to be  
22 able to speak off the top of my head. So if we refer to  
23 them, it might help refresh my memory.

24 Q. Okay. Well looking at page 27 of Mr. Cooper's  
25 report which provides both a map and those population

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 91

1 statistics for illustrative plan one?

2 A. And the page number was?

3 Q. Page 27?

4 A. Thank you.

5 Q. And looking there, you wouldn't dispute that

6 Cooper's illustrative plan 1 brings the population

7 deviation down under plus or minus 5 percent; right?

8 MR. WALLACE: Same series of objections. He  
9 may answer.

10 A. In what he labels a table as Figure 11, he has  
11 district 1 as a minus 3.14 percent, district 3 as plus  
12 3.02 percent.

13 Q. So you wouldn't dispute that he brings the  
14 population deviation down below plus or minus 5 percent  
15 with his illustrative plan 1?

16 A. Three percent is less than 5 percent.

17 Q. But the range is down by four points overall?

18 A. Yes.

19 Q. And then looking at illustrative plan 2, page  
20 30, you wouldn't dispute that for illustrative plan 2,  
21 the population deviation is cut down to less than  
22 3 percent total?

23 MR. WALLACE: Same series of objections.

24 You may answer.

25 Q. Plus or mine about point-and-a-half?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 92

1           A. In figure 14, he shows district 1 at minus 1.59  
2 percent, district 2 at 1.05 percent, and district 3 at  
3 0.53 percent.

4           Q. So would you agree that illustrative plan two  
5 significantly reduces account population deviation from  
6 the existing plan?

7           A. I would not use the term "significant"  
8 necessarily. It reduces it.

9           Q. And then looking at the figures for least  
10 change plan 1 on page 34, same questions. Has  
11 Mr. Cooper for this plan reduced the population  
12 deviation for the supreme court districts below that  
13 plus or minus that 5 percent threshold?

14           MR. WALLACE: Same objections. He may  
15 answer.

16           A. In district 1, he has minus 4.65 percent,  
17 district 2, 1.2 percent, district three, 3.44 percent.

18           Q. So the total deviation there is less than plus  
19 or minus 5 percent?

20           A. It is.

21           Q. And then look at just the next page, we have  
22 those figures for lease change plan 2, and again  
23 Mr. Cooper has reduced the deviation range below plus or  
24 minus 5 percent?

25           MR. WALLACE: Same objections. He may

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 93

1 answer.

2 A. You're talking about Figure 18?

3 Q. Correct.

4 A. I have to ask a question why he's labels tables  
5 and figures, but -- that's odd.

6 Q. Back to you.

7 A. I'll answer it, just -- hard to look at a table  
8 that's labeled as a figure. Okay. So here he has  
9 district 1 at minus 2.55 percent, district 2 is at 5.70  
10 percent, district 3 is minus .2 -- 2.51 percent.

11 Q. So deviation range is less than plus minus 5  
12 percent?

13 A. Well, in two of them.

14 Q. The total range -- I would say total range is  
15 less than 10 percent?

16 A. You're talking about going from minus 2.5  
17 percent to 5 percent, yes.

18 Q. Correct.

19 A. Yes.

20 Q. Okay. So with respect to the traditional  
21 redistricting principle of population equality,  
22 Mr. Cooper's plans all improve on the existing plan?

23 MR. WALLACE: Same series of objections. He  
24 may answer.

25 A. His plans show ranges that generally are below

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 94

1 plus or minus 10 percent.

2 Q. Plus or minus 5 percent?

3 A. Plus or minus 5 percent not exclusively, but  
4 generally.

5 Q. And just in terms of the idea of weighting  
6 every vote equally, one person, one vote Mr. Cooper's  
7 plans tends to weight every vote more equally than the  
8 existing plan?

9 MR. WALLACE: Same series of objections. He  
10 may answer.

11 A. These are not voters, it's a total population.

12 Q. They -- that is correct. Mr. Cooper's plans  
13 tend to weight the representation of persons in  
14 Mississippi more equally than the existing plan?

15 MR. WALLACE: Same objection and the  
16 question is what does "representation" mean. But he may  
17 answer if he understands it.

18 A. I don't understand it.

19 Q. Mr. Cooper's plans adhere more closely to the  
20 ideal of every person having an equal share of  
21 representation?

22 MR. WALLACE: Objection. And he may answer.

23 A. Mr. Cooper's plan shows the -- as you're  
24 discussing, the ranges in terms of deviations from  
25 ideals which I think are calculated by the means. Is

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 95

1 that correct?

2 Q. As I understand it.

3 A. Yeah. So if he's calculating the mean, he's  
4 showing less deviation. Now, let me ask you a question.  
5 Would it be better to use the mean or the median?

6 Q. I'm not going to answer your question while  
7 we're on the record.

8 A. Yes. So there's -- and part of the issue about  
9 using means is, what's the different between a mean and  
10 a median? What does one of them do that the other one  
11 doesn't? It's a question -- it's not fair to ask you  
12 the question, I understand. But it's a question that  
13 you can see that I'm asking in general. Why use a mean?  
14 Means are subject to outliers. If you've got outliers  
15 in certain districts, it's going to weight the mean this  
16 way or the other way. So one question you could ask of  
17 all this entire analysis is: Why not use the mean.  
18 That's my point.

19 Q. Do you know whether courts in evaluating  
20 compliance with the principle of population equality use  
21 mean or median or what metric they use?

22 A. I do not, not. I can tell you as a  
23 demographer, in certain cases I would use a median much  
24 more than I'd use a mean. It depends on what's going on  
25 with outliers and observations and what the distribution

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 96

1 looks like. If you have a skewed distribution, I  
2 would -- and if you want to say this represents kind of  
3 the average, I would select a median over a mean,  
4 probably.

5 Q. I'm tempted to ask you one question because it  
6 is interesting.

7 A. It is. Please ask.

8 Q. Well, I just -- I mean on the question of one  
9 person, one vote which is, as we discussed, the ideal  
10 that's -- that is implemented, would a median not --  
11 would the use of a median to determine equal population  
12 among districts not lead to situations where districts  
13 were unequally populated?

14 MR. WALLACE: He opened this, so I'll let  
15 him answer that.

16 A. It's possible. What I would tend to look at  
17 and with any kind of averages like this is, I would look  
18 at what the distributions look like for them and then  
19 maybe even display both of them. They might give you  
20 supporting answers, they might give you different  
21 answers.

22 Q. But relying on the mean allows you to ensure  
23 that the actual population of each district is as equal  
24 as possible?

25 A. Again, that's one way to measure what averages

Page 97

1 are. In not every case does it represent, you know,  
2 where the bulk of the people are. If you've got  
3 something that's an extreme outlier -- income is a  
4 classic -- a whole bunch of people have low incomes, one  
5 person has a real high income, what does it do to the  
6 mean? It drives it way up. So if you're saying here's  
7 the mean income but 85 percent of the people are below  
8 that mean, does that really characterize the whole set  
9 of people?

10                 And that's what gets back to my question  
11 about maybe it's better to use the median in some of  
12 these cases. So that's why I have a difficult time kind  
13 of answering some of your questions that it's -- are  
14 they -- is more equal to do this, because it would, I  
15 think, would require some more research, and that  
16 research would involve looking at different types of  
17 averages. And whether or not courts use it, I don't  
18 know the answer to that.

19                 Q. So you think it would be appropriate to use the  
20 median population of each district to assess whether  
21 population equality is --

22                 A. I would look at it as a -- possibly along means  
23 and different types of means. There might be a need for  
24 a harmonic mean. I don't know the answers in advance.  
25 I look at is as a research question. Do you follow me?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 98

1 I'm not saying one's better than the other, but it may  
2 be the case -- again, depending on the distributions, if  
3 you have a distribution where people are really  
4 clustered around one point, a mean is probably going to  
5 be good, and if symmetrical, the distribution. If you  
6 have a skewed distribution, it's not symmetrical, then  
7 it may be the means is better. But it's a case by case  
8 situation where you have to evaluate what the data are  
9 showing you.

10 Q. So let's move on to the next districting  
11 principle. Minority vote dilution, you would agree  
12 consistent with the sources you relied on that we've  
13 discussed already that protecting against minority vote  
14 dilution is another consideration that an electoral map  
15 drawer has to think about?

16 MR. WALLACE: Objection to vagueness,  
17 objection as to asking for a legal conclusion, objection  
18 as to being outside the scope of the court order. But  
19 he may answer.

20 A. I'm not sure what a given map drawer would do.  
21 But I think vote dilution would be a consideration and  
22 something to do with redistricting.

23 Q. For example, the congressional research service  
24 report that you cite said protecting racial language  
25 minorities from vote dilution is a consideration to be

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 99

1 taken into account?

2 A. Yes.

3 Q. And you would agree that the existing Supreme  
4 Court district 1 is 49.3 percent black voting age  
5 population?

6 A. I believe that's the case. Point me to where  
7 it's at in here again since I haven't reviewed this  
8 report in a long time.

9 Q. Well, we can look at Mr. Cooper's report on  
10 page 17. I believe those numbers are accurate. Page  
11 16, excuse me.

12 A. Thank you.

13 Q. Statistics of the current plan.

14 A. I'm here. So the question was?

15 Q. The question was: You'd agree that the black  
16 voting age population of the current district 1 is 49.3  
17 percent, 49.29?

18 A. In 2020 it's 49.29 in district 1.

19 Q. Uh-huh. And you would agree -- and we can look  
20 at those numbers -- for example, on page 27 of  
21 Mr. Cooper's report, we start talking about the numbers  
22 to the illustrative plans. You would agree that  
23 Mr. Cooper's plans increase the black voting age  
24 population of district 1?

25 A. Are you talking about Figure 11?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 100

1           Q. Figure 11, Figure 13, the figures we talked  
2 about.

3           A. In --

4           Q. Mr. Cooper's plans all increase the black  
5 voting age population of district 1?

6           A. In figure 7, it shows district 1 in 2020 as  
7 having 49.29 percent; in Figure 11, illustrative plan 1,  
8 2020 census, it shows district 1 with a percent 18 plus  
9 black, which I'm assuming is the voting age population,  
10 just stated a different way, is 55.31 percent.

11          Q. So Mr. Cooper's illustrative plan 1 increases  
12 the black voting age population of the district by just  
13 6 points?

14          A. That's correct.

15          Q. And looking at Figure 14 on page 30,  
16 illustrative plan 2 increases the black voting age  
17 population of the district by a little under 5 points?

18          A. You're asking about district 2 now?

19          Q. District 1. Excuse me.

20          A. In district, Figure 14 shows it as being 54.19  
21 percent.

22          Q. All right. So 4.9 percent increase in black  
23 voting age population from 49.29; right?

24          A. It's an increase from that, yes.

25          Q. A 4.9 percent increase?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 101

1           A. Approximately, yes.

2           Q. So we talked earlier about racially polarized  
3 voting. Assuming the existence of cohesive racially  
4 polarized voting patterns, increasing the black voting  
5 age population at district by 5 or 6 points is going to  
6 give black voters in that district a better chance of  
7 electing their preferred candidate; right?

8           MR. WALLACE: Objection to the form,  
9 objection as to being outside the scope of any report,  
10 and objection as to being outside the scope of the  
11 court's order. But he may answer if he can.

12          A. Could you give me more hypotheticals on it?  
13 Would this be assuming that all the race groups vote as  
14 a block, for example?

15          Q. Correct. Assuming block voting by black  
16 voters, block voting by white voters for different  
17 candidate, if you increase the black voting age  
18 population by 5 or 6 points as Mr. Cooper does, black  
19 voters are going to have a better chance at electing  
20 their preferred candidates?

21           MR. WALLACE: Same objections. He may  
22 answer.

23          A. So you're -- all else equal?

24          Q. Yeah.

25          A. Everything else equal, that's how you're asking

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 102

1 the question. In block voting, etcetera, etcetera,  
2 would appear that that would be the case.

3 Q. Now let's talk about contiguity. You don't  
4 dispute that all the illustrative plans outlined in  
5 Mr. Cooper's reports are contiguous, do you?

6 MR. WALLACE: Same set of objections. He  
7 may answer.

8 A. I'd have to go back and look at what he did  
9 since I haven't reviewed this report and looked at it  
10 for months until today.

11 Q. What is "contiguity" in your understanding?

12 A. It would -- meaning that you're trying to  
13 retain some kind of existence over time as you go  
14 through time.

15 Q. If I --

16 A. The characteristics would remain the same,  
17 there's continuity. It's not an abrupt change.

18 MR. WALLACE: I think he asked about the  
19 contiguity not continuity.

20 Q. Correct.

21 A. In that sense, it means geographic location of  
22 people separated from one another.

23 Q. Correct.

24 A. Or units separated from one another.

25 Q. Correct. And in terms of geographic

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 103

1 contiguity, all the districts in all Mr. Cooper's plans  
2 are contiguous; right?

3 A. I'd have to look, but I believe that's the  
4 case. What you're asking is, there's not a county, say,  
5 in northeast Mississippi that's isolated and part of a  
6 district 1, for example.

7 Q. Yeah. He didn't, like, just show Chickasaw  
8 County in district 1 or something?

9 A. That's correct.

10 Q. Okay. Same as the enacted plan, also  
11 contiguous?

12 A. I believe that's the case, yeah.

13 Q. So let's talk about compactness. Paragraph 72  
14 of your report, page 38. If you can turn there, that  
15 would be advisable. You say: "Compactness is a tool  
16 that can be used in redistricting to compare the  
17 relative compactness of existing districts against new  
18 districts to determine whether the new districts entail  
19 minimal or large-scale changes from the existing  
20 districts."

21 A. And that's paragraph 72?

22 Q. Yes.

23 A. Thank you.

24 Q. Starting with the words "compactness is a  
25 tool."

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 104

1           A. I'm there.

2           Q. You say: "Compactness is tool a that can be  
3 used in redistricting to compare the relative  
4 compactness of existing districts against new districts  
5 to determine whether the new districts entail minimum or  
6 large-scale changes from the existing districts."

7           A. Corrects.

8           Q. What is the basis for that characterization of  
9 what compactness is?

10           MR. WALLACE: Same objection as being  
11 outside the scope of the court's order, but he may  
12 answer.

13           A. In the sense of the legal requirements, what  
14 compactness is, or some other kind of definition?

15           Q. I just -- where did you get this  
16 characterization of compactness that you offer up here?

17           A. Are you asking me -- I'd have to go back and  
18 look at my notes as to where I got it. It's not on the  
19 top of my head. As I said, I haven't looked at this  
20 report in months.

21           Q. What does it mean to say that "compactness is a  
22 tool that can be used in redistricting to compare the  
23 relevant compactness of districts"?

24           A. In that sense, it means how spread out are  
25 they.

Page 105

1           Q. When you say "compactness is a tool," are you  
2 referring to the different compactness metrics like  
3 Reock and Polsby-Popper and Schwartzberg?

4           A. That's one of the ways of looking at it, what  
5 the summary measures are that it might be.

6           Q. Would you agree that compactness is a term that  
7 refers to whether a district is regularly shaped?

8           MR. WALLACE: Same objection plus legal  
9 conclusion, he may answer.

10          A. Yes.

11          Q. And looking at a passage from the CRS report  
12 that's Exhibit 11 -- do we still have that around here?  
13 It should be under -- oh, right here. There we go.

14           Looking back at Exhibit 11, page 11, let me  
15 know when you're there.

16          A. I am.

17          Q. Okay. That report from the CRS that you relied  
18 upon says: "From the geographic perspective,  
19 compactness is usually defined by reference shapes, e.g.  
20 most compact shape is a circle, followed by a square, a  
21 rectangle or references to geographic measures such as  
22 geographic dispersion perimeter measures or population  
23 measures." Do you agree with that?

24          A. Yes. It's consistent with what I answered  
25 before, how distributed our points are.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 106

1 Q. And as you understand it, are there different  
2 ways that someone evaluating a map can know whether a  
3 district is sufficiently compact?

4 A. You named some of the measures.

5 MR. WALLACE: Same objections as before.

6 And person's evaluating a map is completely vague. If  
7 you're talking about a judge, I object to asking for a  
8 legal conclusion. You may answer.

9 A. There are different measure for summarizing  
10 what compactness is, as you listed before.

11 Q. And there's no one particular method that's the  
12 best method for assessing compactness?

13 A. That was my understanding looking at the  
14 different measures, they each have their own strengths  
15 and weaknesses. So in that sense, you're certain to  
16 look at things like averages.

17 Q. So, for example, in paragraph 73, you say:  
18 "There's no professional consensus on the right measure  
19 and every widely used measure works differently?"

20 A. Correct.

21 Q. So there's no one definitive measure of  
22 compactness?

23 A. From the standpoint from what I could tell  
24 looking at the literature, yes, that appears to be the  
25 case.

Page 107

1           Q. And Mr. Cooper in his responsive report on  
2 page 8 -- and we can look at it or not, but I'll read  
3 you the quote and you can --

4           A. Just read it, sure.

5           Q. But he says: "Redistricting experts and map  
6 drawers commonly employ an eyeball test to assess  
7 whether a plan is reasonably compact." Do you agree  
8 with Mr. Cooper's statement there?

9           A. I don't know what map drawers do commonly.

10          Q. Because you're not a map drawer?

11          A. Or -- that's correct.

12          Q. You don't evaluate maps?

13          A. Well, I don't know -- I don't know if people  
14 who evaluate maps use an eyeball test or not routinely.  
15 I don't know the answer to that.

16          Q. You're not familiar with the eye test or the  
17 eyeball test for measure compactness?

18          A. What would the eyeball test be?

19          Q. The eye test?

20          A. You're just looking at somebody's -- how much  
21 does it vary from being a circle, for example?

22          Q. Yeah. You're just looking with your eye to  
23 assess the visual compactness of a district.

24          A. I can understand people doing that, use a lot  
25 of visual assessments in all sorts of things, but

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 108

1 whether that goes to the point where you're actually  
2 going to say or use that in something or whether or not  
3 you're going to use a metric, I don't know the answer to  
4 that.

5 Q. And let's just pull up what's been marked as  
6 Exhibit 13. This is that text that Mr. Bryan and  
7 Mr. Morrison wrote. And do you still have that,  
8 Exhibit 13?

9 A. Yeah, somewhere.

10 MR. WALLACE: I'll give him mine if you can  
11 give me the page number.

12 MR. SAVITZKY: Page 48.

13 MR. WALLACE: Okay.

14 MR. SAVITZKY: And you tell me when you're  
15 there.

16 THE WITNESS: Thank you.

17 BY MR. SAVITZKY:

18 Q. Do you see there's a paragraph about  
19 compactness there?

20 A. I do.

21 Q. And the last sentence says: "No one method is  
22 best and the colloquial eyeball test of a district's  
23 appearance and function may be germane."

24 A. I see that.

25 Q. So having reviewed the text written by

Page 109

1 Mr. Morrison and Mr. Bryan, would you agree that the  
2 eyeball test is one measure that is used to asses the  
3 compactness of a district?

4 MR. WALLACE: Same objection as asking for a  
5 legal conclusion and being outside the scope of the  
6 order. The he may answer.

7 A. And again, what I would stress is that they  
8 wrote that as one possibility, but whether or not I  
9 agree with the eyeball test being germane is not  
10 necessarily my opinion. I tend to look more at metrics  
11 than eyeball test, but I understand there's a need for  
12 things like that when you're -- when you don't have good  
13 measures or you're initially looking at a project and  
14 you need something qualitative to start off with. So it  
15 goes back to my answer being I'm not sure if it's  
16 germane or useful or not or whether or not map drawers  
17 use it all the time.

18 Q. Okay. Is it fair to say that a mapper who has  
19 drawn many plans, a person who draws electoral maps and  
20 has drawn many plans and looked at many districts is  
21 going to sort of develop a better sense of whether a  
22 district is compact visually?

23 MR. WALLACE: Objection to the vagueness and  
24 in addition to not knowing who a map drawer is, not  
25 knowing what "better" is.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 110

1           A. I can't answer that question. I don't know.

2           Q. Is it fair to say that someone who reviews more  
3 electoral districts is going to develop a sense of  
4 whether a district is more or less visually compact?

5           MR. WALLACE: Same objection. He may  
6 answer.

7           A. And my answer again is I don't know.

8           Q. On page 38, Footnote 29 of your report, you  
9 cite a lecture by Gary King called "How to Measure  
10 Legislative District Compactness If You Only Know It  
11 When You See It." Is that something that you rely on?

12          A. And that's footnote?

13          Q. 29.

14          MR. WALLACE: 29 on page 38.

15          MR. SAVITZKY: Yep.

16          A. Yes, I recall. Let me look at what I actually  
17 put in the text for that. Specifically, that says: "In  
18 contrast, academics have shown that compactness has  
19 multiple dimensions and have generally many conflicting  
20 measures."

21          Q. And let's just mark as Exhibit 14 this is the  
22 web page here. And looking at the one, two, three --  
23 third sentence -- the second sentence too. Well  
24 actually, take a look at it and then let me try to ask a  
25 summary question. Let me know when you've read the

Page 111

1 first couple sentences.

2 A. Okay.

3 Q. So basically what they are saying is that  
4 academics have developed many very complex measurements  
5 of compactness but courts and other observers see  
6 compactness as a sort of simple visual  
7 you-know-it-when-you-see-it-type test. And they say  
8 both of those are right, there are many complex and  
9 multidimensional tests of compactness, but there is also  
10 what they say is a particular unit dimensional ordering  
11 that represents a common understanding of compactness in  
12 the law across people. Am I accurately summarizing what  
13 King is saying here?

14 A. And then he goes on to say that he's developing  
15 a statistic model that predicts with high accuracy what  
16 that is, yes.

17 Q. Based on this unidimensional sort of common  
18 understanding that he's discerned?

19 A. Yes.

20 Q. And I just -- it's actually -- we're not going  
21 to spend too much more time on it, but it totally's  
22 fascinating. Did you look to the slides for the lecture  
23 that King did?

24 A. I'd have to -- I don't recall. Like I said,  
25 this is -- it's so long ago I did the report, I can't

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 112

1 remember what I looked at now or not.

2 Q. So I'm just going to mark the lecture slides as  
3 Exhibit 15 here. And again, I don't want to spend a ton  
4 if time on it because this is a long, long lecture, but  
5 if you can -- I'll point you to the page. At 424, there  
6 is a series of illustrating --

7 A. Yes.

8 Q. -- this unidimensional --

9 A. Uh-huh.

10 Q. -- you know it when you see it --

11 A. Uh-huh.

12 Q. -- metric; right?

13 MR. WALLACE: Page 4 --

14 MR. SAVITZKY: It's marked 424 at the  
15 bottom.

16 MR. WALLACE: 4, slash, 24?

17 MR. SAVITZKY: Correct.

18 MR. WALLACE: Okay. I was looking for 424.

19 Okay.

20 Q. So you go down and each one is a click, you  
21 click, click, click through --

22 A. Yeah.

23 Q. -- we see as we move through, once we see all  
24 four districts there, this unidimensional ordering. All  
25 under the header: "A simple single compactness

Page 113

1 dimension that you know when you see." Right? And as  
2 we go on and see the text below, it says dimension is  
3 intuitive; right?

4 A. That's what he states.

5 Q. Okay. And looking at this, does this give you  
6 a sense of what the eyeball test is?

7 MR. WALLACE: Well objection to the extent  
8 the eyeball test is a legal test in which he has no  
9 expertise. But if he has an opinion on this report  
10 subject to the fact that it's contrary to the court's or  
11 order, he may answer.

12 Q. And setting aside from whatever it might mean  
13 as a legal matter, just --

14 A. I have an opinion.

15 Q. Yeah, go ahead.

16 A. So if you look at the four figures on one of  
17 these and since they all say 4/24, I'll have to point  
18 this out to you.

19 Q. Yes, I see it.

20 A. Okay. Suppose that the eyeball test I'm  
21 looking at the first figure on the left, to the second  
22 figure to the right of it, they're somewhere dissimilar.  
23 If I look at the figure on the left to the far figure on  
24 the far right, they're very dissimilar. So these are  
25 kind of simple examples of what could take place. Is

Page 114

1 figure -- the third one to the right really different  
2 than the fourth one to the right? Is it more or less  
3 compact? Just eyeballing, it might be difficult to say.  
4 And again, these are examples that he put up to  
5 illustrate the point he's trying to make.

6 So in some cases, it may be that the eyeball  
7 test doesn't work, and I could point to each of these  
8 examples right here. Is the figure, the third most  
9 right one really more compact than the fourth most right  
10 one? You know, there would be questions from people  
11 about that. And as you get closer and closer, instead  
12 of having these discreet illustrations, if you had more  
13 of a continuous model and you're getting closer and  
14 closer to the one on the far right, which one is more or  
15 less compact? It would be hard to answer, wouldn't it?

16 Q. So looking at -- so would you agree if you're  
17 visually with your eyes, you can make gross distinctions  
18 but perhaps not fine distinctions?

19 A. Or it may be the case that if you've got  
20 something as extreme as what's on the far left here as  
21 he examples and what's on the far right, then you can  
22 say yes, it looks like the one on the far left is very  
23 much more compact than the other ones. And there's  
24 going to other cases where I think the eyeball test is  
25 going to be difficult to measure that.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 115

1           Q. All right. And Mr. Cooper states -- now we're  
2 looking at -- going back to page 8 of his responsive  
3 report. This one we can definitely -- if you want to  
4 keep a copy for later, it is a quite fascinating  
5 lecture, but --

6           A. Thank you.

7           Q. Mr. Cooper states at page 8 of his rebuttal  
8 report which I believe is Exhibit 10, which you should  
9 have it there, he says --

10          A. I've got 9. Bear with me.

11          Q. Yes.

12          A. Thank you. And where on Exhibit 10 are we  
13 going?

14          Q. Page 8.

15          A. Thank you.

16          Q. And he says: "Using the eyeball test, the  
17 illustrative plans and the least changed plans, I have  
18 drawn are reasonably compact." And you are not claiming  
19 to dispute that statement, are you?

20           MR. WALLACE: Objection as to being outside  
21 the bounds of the court's order, but he may answer.

22          A. And I was not asked to review this after he  
23 wrote this report, so I can't give you an answer whether  
24 or not I dispute at this point or -- or not at this  
25 point. I have to go back and reanalyze what he did.

Page 116

1           Q. I mean, you testified earlier that you did  
2 review Mr. Cooper's rebuttal report.

3           A. Yes, but I was not asked to actually do  
4 something with it, to actually analyze it. Do you  
5 follow me? So I looked at it, I read it, but I was not  
6 tasked with or asked to go on and say something back in  
7 regard to it.

8           Q. And as you sit here now, you're not disputing  
9 that statement?

10          A. I can neither dispute or not dispute it at this  
11 point. Again, it's a research question, and I wasn't  
12 asked to do that.

13          Q. Well, I'm asking you as you sit here now, do  
14 you dispute the statement Mr. Cooper makes that under  
15 the eyeball test, the plans he drew are reasonably  
16 compact?

17          A. And again, I stress that since I haven't looked  
18 at what he's arguing here with sufficient time ahead of  
19 it to know, I can't answer that question directly.

20          Q. Well, given that you're not saying you do  
21 dispute it, can I take that to mean that you're not  
22 currently disputing it?

23          A. I -- I'm not saying that. I don't have an  
24 opinion at this time on it. Would that be better?

25          Q. That'll do.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 117

1           A. Okay.

2           Q. So getting back to the compactness analysis  
3 that you did, we'll talk more about your report. In  
4 your report, you analyze compactness cores of the  
5 illustrative plan supreme court districts that  
6 Mr. Cooper drew, and you concluded that they are less  
7 compact than the existing plan. Is that generally --

8           A. I believe that's the case, yes.

9           Q. And you mentioned earlier this is -- Bryan  
10 GeoDemographics did this analysis new?

11          A. They did at my request, computed the scores,  
12 put data together, that's correct.

13          Q. And as far as you know, they used the ArcGIS or  
14 ArcView program?

15          A. I'm pretty sure that's what Tom Bryan used.

16          Q. Were you able to verify the results that they  
17 provided to you?

18          A. In what manner?

19          Q. I mean did you independently verify the results  
20 that they gave you with respect to the compactness  
21 scores of the district?

22          A. You mean go ask somebody else who does GIS to  
23 see if that's the case?

24          Q. Sure, or do it yourself.

25          A. I'm not capable of doing it myself in that

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 118

1 regard since I didn't run GIS programs. And no, I  
2 didn't go ask anybody else to go review it.

3 Q. And just looking at pages 40 to 43, we have  
4 these various tables. Did you design these tables in  
5 this layout here or did Bryan?

6 A. I asked him to put these together and then --  
7 and give me information on them in regard to all these  
8 measures of doing that, and that's what he did.

9 Q. So Bryan GeoDemographics put these Excel tables  
10 together?

11 A. At my request, yes.

12 Q. And after reviewing these various compactness  
13 scores, you didn't conclude that the illustrative plans  
14 are insufficiently compact in terms of adhering to  
15 traditional districting principles, did you?

16 MR. WALLACE: Objection to asking for a  
17 legal conclusion on what's insufficient. But he may  
18 answer.

19 A. That's correct. Insufficient is not something  
20 I can speak to. They're just different from what the  
21 existing plans were.

22 Q. You're not offering an expert opinion on  
23 whether the illustrative plans compactness scores are  
24 insufficient to meet traditional districting principles?

25 MR. WALLACE: Objection on -- objection to

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 119

1 the extent traditional districting principles may be  
2 incorporated into the law, and I'm not sure how much  
3 that is, but I think you're still asking him for a legal  
4 opinion. But he may answer.

5 A. Yeah, and insufficient is -- they're -- the  
6 "scores" are not as good on average as the score of the  
7 existing plan is my recollection on these in looking at  
8 it. Whether or not that means insufficiency, I don't  
9 know.

10 Q. You didn't offer -- you're not offering any  
11 expert opinion that the compactness scores for the  
12 illustrative plans mean that the districts plans are not  
13 compact?

14 MR. WALLACE: Objection to vagueness, but he  
15 may answer.

16 A. And again my answer is, they're -- the scores  
17 in the sense of compactness are not as compact as what's  
18 in the existing plan.

19 Q. You didn't consider whether the compactness  
20 scores of the illustrative plans are within the normal  
21 or acceptable range of compactness for an electoral  
22 districting map?

23 MR. WALLACE: Objection to vagueness as to  
24 normal and acceptable, but he may answer.

25 A. I did not.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 120

1                   MR. SAVITZKY: And I'm now going to mark --  
2 where are we at -- 16. We're on the second binder. I'm  
3 now going to mark as Exhibit 16 a paper called  
4 "Redrawing the Map on Redistricting" which was cited in  
5 Mr. Cooper's rebuttal report. There you go, copy for  
6 Mr. Wallace.

7                   MR. WALLACE: 16, you said?

8                   MR. SAVITZKY: Yes.

9                   MR. WALLACE: Okay.

10 BY MR. SAVITZKY:

11                  Q. So in looking at page 8 of Exhibit 16, we can  
12 see that what the authors of this report did in their  
13 Table 5 is, they looked at the mean compactness scores  
14 for congressional districts in every state. This is  
15 following the 2010 redistricting cycle.

16                  A. What are the page numbers?

17                  Q. They are in very light gray at the bottom of  
18 the page.

19                  A. Oh, wow.

20                  MR. WALLACE: There's something there.

21                  A. I see it okay. And you're asking about page 8?

22                  Q. Yeah.

23                  A. The table, not the Figure 5.

24                  Q. Correct. Table 5, exactly.

25                  A. Table 5.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 121

1           Q. Exactly. So looking at this table, we can see  
2 in that the last round of congressional districting, the  
3 mean Polsby-Popper score for congressional districts in  
4 Mississippi was 23.33; is that right?

5           A. I'm trying to go down and find Mississippi. I  
6 see it. Thank you. So they're ordered by rank of  
7 score. Okay. 23.33.

8           Q. Is that right?

9           A. Yes.

10          Q. And the mean Schwartzberg score is 4758, .4758?

11          A. 47.58, yes.

12          Q. And the mean Convex Hull score is 76.84?

13          A. Yes.

14          Q. And I just want to note for the record that  
15 these are presented as whole numbers rather than  
16 fractions, but I -- usually, I see them presented as  
17 fractions between 0 and 1 or decimals between 0 and 1,  
18 but I think we understand that we're referring to the  
19 same range of between 0 and 1 or in this case between 0  
20 and 100; is that right?

21          A. I'd have to look to know that that's the case,  
22 but I believe you, you have no reason to tell me  
23 otherwise; right?

24          Q. Yeah. And then just looking at the Reock  
25 score, we have mean Reock score of 38 --

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 122

1           A. That's correct.

2           Q. -- 08? Right. So you didn't look at some type  
3 of benchmark like this to assess the compactness scores  
4 for Mr. Cooper's illustrative districts?

5           A. I did not.

6           Q. And just turning back to what again I think has  
7 been marked as Exhibit 10, Mr. Cooper's responsive -- or  
8 rebuttal report, that's right, Exhibit 10. Or actually,  
9 we can look at your report at page 40. You list the  
10 scores for illustrative district 1 right here or for all  
11 of it, illustrative --

12           MR. WALLACE: Hang on. What page in --

13           MR. SAVITZKY: Page 40 of your January  
14 report. And do keep what we marked as Exhibit 16 handy  
15 because I want to just do a little quick head-to-head  
16 look.

17 BY MR. SAVITZKY:

18           Q. So looking at the scores, what I want to do is  
19 compare the mean compactness scores for Cooper's  
20 illustrative district 1 and mean compactness scores for  
21 the Mississippi congressional districts that we were  
22 looking at on page 8 of Exhibit 16.

23           A. So we're comparing the supreme court district  
24 scores to the congressional district scores.

25           Q. Yes. Mean, mean. Exactly.

Page 123

1                   MR. WALLACE: All right. Let me objection  
2 to the relevance of comparing a document -- a document  
3 prepared by an expert witness with a plan ordered by the  
4 United States District Court for the Southern District  
5 of Mississippi, because Mississippi in 2012 was governed  
6 by a plan written by Judge Kalley (phonetic), Judge  
7 Wingate, and Judge Bramlette.

8                   Q. And I'll ask the question of the witness: You  
9 don't have any reason to think that the congressional  
10 districting plan that was put into place in Mississippi  
11 after the 2010 cycle was insufficiently compact or  
12 didn't comply with traditional districting principles,  
13 do you?

14                  A. I don't have an opinion on that.

15                  Q. Okay. And what Mr. Cooper says when he cites  
16 this report that we've introduced as Exhibit 16 is:  
17 "Even in terms of compactness scores, the plans that  
18 I've drawn are superior to many congressional  
19 districting plans drawn in the past decade." That's the  
20 statement in his report.

21                  MR. WALLACE: And where it is in his report?

22                  MR. SAVITZKY: On pages 8 to 9, paragraph  
23 19.

24                  MR. WALLACE: Okay.

25

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 124

1 BY MR. SAVITZKY:

2 Q. So now looking at that, just looking at the  
3 scores, the mean compactness scores that you report on  
4 page 40 in Table III F.7.a and comparing those to the  
5 mean compactness scores for this Mississippi  
6 congressional district, we see Polsby-Popper score of  
7 Cooper's illustrative plan 1 as .27 mean, so that's a  
8 little higher than .23?

9 MR. WALLACE: Objection to relevance and  
10 objection as being outside the scope of the court's  
11 order. But he may answer if he can.

12 Q. You would agree that that Polsby-Popper scores  
13 are pretty similar?

14 A. Given that they -- for supreme court districts  
15 compared to congressional districts.

16 Q. Yeah.

17 A. They look fairly similar.

18 Q. And the Convex Hull scores, also very similar,  
19 Cooper's plan is just a little bit higher but basically  
20 identical, .78 versus .6784?

21 MR. WALLACE: Same objections. He may  
22 answer.

23 A. I see the mean score Convex Hull here for  
24 Mississippi as being in the congressional district,  
25 76.84.

Page 125

1 Q. Yep.

2 A. -- and then for Cooper's illustrative plan, I  
3 see it at 78.

4 Q. So Cooper's a little higher, but basically  
5 identical?

6 A. It's a little higher.

7 Q. Okay. And Reock, it's a littler lower, 37 for  
8 Cooper's illustrative 1, .348 for the congressional  
9 districting plan --

10 A. Yes.

11 Q. -- right? So if you were to use Mississippi  
12 congressional districts from last cycle as a benchmark,  
13 Cooper's plans are in line with that benchmark?

14 MR. WALLACE: Same objections, but he may  
15 answer.

16 A. It's difficult to say when you're crossing  
17 districts like this and -- are they crossing points in  
18 time as well whether or not they're suitable benchmarks?

19 Q. But assuming that the benchmark is suitable,  
20 they're comparable?

21 A. It's a big assumption you're asking me to make  
22 without knowledge of exactly, you know, all the details  
23 in here. But if you want me to say everything else  
24 being equal, again, and assuming that it's all the same,  
25 they're comparable.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 126

1           Q. Okay. And looking at -- now we'll look at  
2 Cooper's responsive report page 10, Figure 1.  
3 Mr. Cooper does a compactness analysis, looks head --  
4 the head-to-head comparison between the existing plan  
5 and the illustrative plan 1. Do you see that in  
6 Figure 1?

7           A. I do.

8           Q. And with respect to the mean compactness, you  
9 would agree that existing supreme court plan and  
10 illustrative plan 1 are .01 apart on the Polsby-Popper  
11 score; right?

12          A. Yes.

13          Q. And they're .01 apart on Convex Hull; right?

14          A. Yes.

15          Q. Cooper's a little higher on Convex Hull,  
16 existing is a little higher on Polsby-Popper?

17          A. Yes.

18          Q. You would agree that a .1 difference is  
19 basically identical?

20          A. It depends on the contexts.

21          Q. Okay. You would agree they're substantially  
22 similar?

23          A. Again, depends on the context. You know, if  
24 you're looking at this from -- if you're doing a sample,  
25 really large samples may have a very small difference in

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 127

1 some measure you're looking at like income, and \$10 is  
2 enough to say it's different. So I'm saying it depends  
3 on the context.

4 Q. In the context of evaluating compactness scores  
5 like Polsby-Popper and Convex Hull, you would agree that  
6 a difference of .01 is negligible?

7 A. In general, that's what I agree with, yes. So  
8 in that context, yes.

9 Q. Great. And on the Reock -- oh, sorry. And on  
10 the Schwartzberg metric, the plans are exactly  
11 identical?

12 A. Yes.

13 Q. So the two plans are either exactly or  
14 essentially the same on three different metrics of  
15 compactness?

16 A. Yes.

17 Q. And then with respect to the Reock score, the  
18 mean Reock score for the existing plan is better at .51  
19 versus .36?

20 A. It's higher, yes.

21 Q. Higher. Excuse me. But you don't conclude  
22 that Reock is a better or more appropriate metric than  
23 any of these other metrics, do you?

24 A. One of the ways to look at them, because of all  
25 these issues about it is to start looking at doing some

Page 128

1 of an average of all the measures too since they all  
2 have their strengths and weaknesses.

3 Q. Are you aware of any instance in which the  
4 different compactness metrics have been and or blended  
5 together?

6 A. Some of the work I've done, yes.

7 Q. In the work that you've done, you averaged or  
8 blended together compactness metrics like Polsby-Popper,  
9 Reock, and Convex Hull?

10 A. Or taking averages of them. Is that in this  
11 report that I did? I'm just asking? Since I haven't  
12 looked at it in a long time, I just asking if I did  
13 that.

14 Q. I mean, I'll represent to you that I don't  
15 recall your doing that in your report.

16 A. Okay. Then I may not have done it in is this  
17 report.

18 Q. Are you aware of any other person analyzing  
19 compactness of district maps who's tried to blend or  
20 average together the different metrics?

21 A. Yeah, I think Tom Bryan has.

22 Q. When did he do that?

23 A. I don't recall, but I think he has.

24 Q. Okay. And looking at Figure 2 on the same page  
25 of Mr. Cooper's report, he conducts a head-to-head

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 129

1 comparison between existing district 1 and illustrative  
2 plan district 1, right, so now he's looking at the mean  
3 scores but at the compactness score for district --  
4 district 1 in particular?

5 A. Yes.

6 Q. And identical Polsby-Popper scores for both  
7 districts; right?

8 A. Yes.

9 Q. And on two of the remaining metrics, Convex  
10 Hull and original Schwartzberg, the illustrative plan  
11 district 1 is more compact than existing district 1;  
12 right?

13 A. It has higher scores in the Convex Hull and  
14 lower score in the original Schwartzberg.

15 Q. Has a lower score. Okay. Kind of got -- so  
16 just stepping back, fair to say that on some of the  
17 metrics, Mr. Cooper's illustrative plan one performs  
18 better and on some of the metrics, the existing plan  
19 performs better?

20 A. In the sense of --

21 MR. WALLACE: Objections -- same objections.  
22 He may answer.

23 A. Yes.

24 Q. So let's talk about political subdivision  
25 splits. You agree that all of Mr. Cooper's illustrative

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 130

1 plans are drawn entirely on whole counties?

2 A. I'd have to refresh my memory and look at his  
3 report, but I believe that was the case.

4 Q. You agree that necessarily because there are no  
5 county boundaries split, the number of county splits is  
6 zero?

7 A. Correct.

8 Q. And you agree the number of precinct or  
9 election districts splits also necessarily zero?

10 A. Since they're all within the same county, yes.

11 Q. And so in terms of that metric of county and  
12 precinct splits, plans are identical, existing plan,  
13 Cooper's illustrative plans, all of them zero county  
14 splits, zero precinct splits; right?

15 A. Correct.

16 Q. Let's talk about communities of interest.

17 What's your understanding of a community of interest?

18 MR. WALLACE: Objection to the extent you're  
19 asking for a legal opinion, but he may answer the  
20 question. Oh, and it's out of the court order, but  
21 everything has been so far, so he may answer that.

22 A. So there's a definition. Do I have it in the  
23 report somewhere of -- of that community of interest?

24 Is it in the report.

25 Q. I'm not sure as I sit here whether you provide

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 131

1 a comprehensive definition in your report but --

2 A. And I don't recall if I did or didn't since I  
3 haven't looked at it in a long time.

4 Q. I mean, I ask you as someone who of offering  
5 analysis of --

6 A. So in general if you're asking me off the top  
7 of head what it means, "community of interest," it  
8 represents a lot of shared social and other  
9 characteristics, economic characteristics.

10 Q. You would agree it, basically, is a community,  
11 a group of people that share some common resource or  
12 interest or priority?

13 A. Or social -- social, economic, and other  
14 cultural characteristics, yes.

15 Q. Got it. You would agree there are many ways to  
16 define a community of interest?

17 A. There could be, yes.

18 Q. So like a city or town could be a community of  
19 interest?

20 A. I guess it depends on the composition that's  
21 their -- what criteria someone's specifically looking  
22 at.

23 Q. It could be a region or a group with a shared  
24 history or culture?

25 A. It could be.

Page 132

1           Q. Could be a region or a group of people with  
2 shared policy interests or shared needs?

3           A. It could be. But I'd look at all those as  
4 possible dimensions of something that could be even  
5 broader if you're looking at community of interest.

6           Q. So -- and is it fair to say when we talk about  
7 communities of interest in the districting context, the  
8 idea is that where reasonable, you should try to group  
9 people with common interests in the same district?

10           MR. WALLACE: Objection as seeking a legal  
11 opinion, but he may answer.

12           A. That's my picture of it.

13           Q. And I'll represent to you that on page 48 of  
14 that redistricting book which has been marked as Exhibit  
15 13, Morrison and Bryan say: "Respecting existing  
16 communities of interest is often a proxy for ensuring  
17 that people of common interests are grouped within the  
18 same district." Does that -- do you agree with that  
19 statement?

20           A. Yes.

21           Q. Now, you don't analyze communities of interest  
22 anywhere in your January report; right?

23           A. I don't believe so. I'd have to go back and  
24 look in the sense of what the cluster analysis I did  
25 was.

Page 133

1 Q. Setting aside the cluster analysis, which we'll  
2 talk about, you don't do any analysis that's relevant to  
3 communities of interest?

4 A. Not that I recall.

5 Q. And you don't dispute that Mr. Cooper  
6 considered Mississippi planning and development district  
7 as a community of interest and evaluated that in his  
8 report?

9 A. I believe that he did.

10 Q. And you don't dispute that a map drawer could  
11 consider Mississippi's planning and development district  
12 as a community of interest?

13 MR. WALLACE: Same objection as to meaning  
14 of "map drawer." He may answer.

15 A. It's possible.

16 Q. As I think you point out in the beginning of  
17 your report, Mississippi Supreme Court districts are  
18 used for transportation, public service commission,  
19 they're used for a number of appointed boards; right?

20 A. They are.

21 Q. So whether the interest of Mississippi's  
22 various planning and development districts are fractured  
23 or not by the designing of a plan could be important for  
24 that reason as well?

25 MR. WALLACE: Objection to the vagueness of

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 134

1 the importance. He may answer.

2 A. It would be.

3 Q. So in looking at -- and now we're back on  
4 Mr. Cooper's October report, paragraph 35. This is  
5 Exhibit 9, I believe, yeah.

6 MR. WALLACE: Paragraph what?

7 MR. SAVITZKY: 35.

8 MR. WALLACE: Okay.

9 MR. SAVITZKY: And I'll give you the page if  
10 that would be helpful. It is page 18. And let me know  
11 when you're there. I'll just clear this out.

12 THE WITNESS: Thank you. I'm there.

13 BY MR. SAVITZKY:

14 Q. And we can see on paragraph 35, Mr. Cooper  
15 says: "I show in the Figure 6 map" -- and if you want  
16 to look at it, it's on the preceding page -- "the 1987  
17 plan splits five of the ten regional planning  
18 districts." And then he lists them. You don't dispute  
19 that, do you?

20 A. Let's see. Let me go back here again. So  
21 you're talking about Figure 6?

22 Q. Yeah. Figure 6 is the existing plan overlaid  
23 on those planning districts. Mr. Cooper says five of  
24 the ten districts -- planning districts are split in the  
25 existing plan. You don't dispute that, do you?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 135

1           A. No.

2           Q. And he says: "Supreme court district 1  
3 contributes to each one of those splits, South Delta is  
4 the only planning district entirely within supreme court  
5 district 1." You don't dispute that, do you?

6           A. No.

7           Q. And now turning to paragraph 51 of Mr. Cooper's  
8 report, that would be on page 26, still on exhibit 9.  
9 You don't dispute Mr. Cooper's statements in  
10 paragraph 51 that: "Illustrative plan 1 splits two  
11 planning districts, North Delta and Central, rather than  
12 five as in the 1987 plan?"

13           A. I believe that's correct.

14           Q. And looking ahead to paragraph 56, you -- on  
15 page 31, you don't dispute Mr. Cooper's statement the  
16 illustrative plan 2 splits three planning districts  
17 rather than five as in the enacted plan?

18           A. That's correct.

19           Q. Are you familiar with the Mississippi Delta?

20           A. The Delta counties, the area?

21           Q. Or the area that's the region in Mississippi  
22 Delta?

23           A. Yes, I am.

24           Q. Is it fair to say based on your knowledge of  
25 Mississippi that the Delta is a culturally,

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 136

1 historically, demographically, socioeconomically  
2 distinct region?

3 MR. WALLACE: Objection to vagueness and  
4 asking for a legal conclusion and being out of time  
5 under the court's order, but he may answer.

6 A. It certainly shares characteristics that are  
7 common internally that are not common elsewhere in the  
8 state of Mississippi.

9 Q. And as someone who studied the demographics of  
10 Mississippi, you would agree the Delta is culturally,  
11 historically, demographically distinct?

12 A. Of other places in Mississippi?

13 Q. Yes.

14 A. Yes.

15 Q. And I would think it's fair to say that the  
16 Mississippi Delta is one of the most culturally,  
17 historically, demographically distinct geographic  
18 regions in the entire South if not the nation. Would  
19 you agree with that?

20 MR. WALLACE: Same objection, but he may  
21 answer.

22 A. People in New Orleans might disagree.

23 Q. Well, one of the most?

24 A. Yeah.

25 Q. Would you agree with that?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 137

1           A. Yeah, I believe it is. Are you talking about a  
2 personal opinion as opposed to a professional opinion?

3           Q. Yeah.

4           A. Absolutely.

5           Q. Fair to say based on your knowledge of  
6 Mississippi, that the Delta has distinct needs and  
7 interests, for example, when it comes to health and  
8 education?

9                   MR. WALLACE: Objection as to meaning of  
10 distinct in addition to previous objections, but he may  
11 answer if he can.

12           A. It may or may not. There's certain sections of  
13 the state that are not in the Delta that may share some  
14 of those characteristics and needs in common with Delta  
15 counties. So again, I would say it's a research  
16 question, not something I can just answer off the top of  
17 my head from a professional opinion. As a personal  
18 opinion, I would say yes, in general I think there are  
19 issues like that that are common to a lot of Delta  
20 counties, but they may be common with counties elsewhere  
21 in Mississippi too.

22           Q. But the concentration of those needs in the  
23 Delta is somewhat unique?

24           A. Again, it may be. But part of the issue you're  
25 talking about is rural. Are rural areas of really

Page 138

1 Northeast Missouri really different in the Delta in  
2 terms of some of the needs? That's -- again, I don't  
3 know the answer to that off the top of my head of the --  
4 looking at rural areas that are high in poverty that may  
5 or may not have the same racial distributions, that may  
6 or may not have the same access to resources. So I  
7 would suspect while there definitely are distinct areas  
8 of interest in the Delta counties, I think they may  
9 share some things with the counties elsewhere in the  
10 State of Mississippi too.

11 Q. You'd agree that the Mississippi Delta could be  
12 considered a community of interest?

13 A. It could be. It depends on what kind of  
14 criteria you're looking at.

15 Q. Would you consider it a community of interest?

16 A. Again, it depends on what someone was asking  
17 me. From the ecological standpoint? From the cultural  
18 standpoint? From the music standpoint?

19 Q. Sure.

20 A. Yeah. It could vary. You know, there are  
21 places on the Delta that would share a lot of common  
22 history in terms of plantation stuff with the counties  
23 over on the Alabama border, for example, and they're not  
24 contiguous, they're different. So if you look at the  
25 counties in areas of Northeast Mississippi where they

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 139

1 sing not Delta Blues but Hill Blues. You know, they're  
2 different styles of music, so --

3 Q. One aspect of the culturally distinct nature of  
4 the Delta?

5 A. That's one, yeah.

6 Q. And the existing supreme court plan fractures  
7 the Delta?

8 MR. WALLACE: Objection to the meaning of  
9 the word "fractures," but he may answer.

10 A. I -- it's -- whether or not it fractures the  
11 Delta, I can't say.

12 Q. But we can just look briefly at page 16 of  
13 Mr. Cooper's report right there --

14 A. Sure.

15 Q. -- and just looking at the map, the Mississippi  
16 Delta is divided under the existing supreme court  
17 districting plan; is that fair to say?

18 A. Does page 16 show the supreme court districts  
19 in colors, is that what you're saying?

20 Q. Correct.

21 A. And under the existing supreme court plan,  
22 you're asking me how is it fractured?

23 Q. I'm asking you if the existing plan divides the  
24 Delta.

25 A. Well, in what sense is divide the Delta? Are

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 140

1 you --

2 Q. Divides the Delta -- excuse me. The plan  
3 divides the Delta between multiple districts?

4 A. So parts of the North Delta that are in here?  
5 In the sense of these are, again, the planning districts  
6 that are named in this map? So from a planning district  
7 standpoint, the North Delta district is in a separate  
8 supreme court district than is the South Delta district.

9 Q. And just setting aside the planning districts  
10 for the moment, are you generally aware of which  
11 counties are in the Mississippi Delta, the region, the  
12 Mississippi Delta, as you understand it?

13 A. I do. You're talking about from Tunica down  
14 towards Vicksburg generally?

15 Q. And thinking about that region, that set of  
16 counties from Tunica down to Vicksburg, the existing  
17 supreme court plan divides that region between different  
18 supreme court districts; right?

19 A. If you're looking from the standpoint of Delta  
20 counties, yes.

21 Q. And we can just turn briefly to Mr. Cooper's  
22 illustrative plan 1 on page 27. And just looking at  
23 that plan and thinking about the Mississippi Delta  
24 region from Tunica Don to Vicksburg, Mr. Cooper's  
25 illustrative district 1 unites the Delta in one

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 141

1 district; right?

2 A. He also had some of the counties that I  
3 wouldn't put in the Delta in that district, so it splits  
4 off from other areas. I mean, that's what it looks like  
5 just looking at his map.

6 Q. But in terms of the distinct region that we've  
7 been talking about, the Mississippi Delta, it is kept  
8 together in Mr. Cooper's configuration of the supreme  
9 court map; right?

10 A. You know, I'd have to think about DeSoto  
11 County, whether or not it's really a Delta county or  
12 not, that he's got on there, but that's one possibility.

13 Q. Setting aside DeSoto County, the Delta is  
14 united in Mr. Cooper's illustrative plan 1?

15 A. Generally speaking, I would agree to that.

16 Q. And just looking at page 30 of the report at  
17 illustrative plan 2 -- are you on page 30?

18 A. I am.

19 Q. And you can see even if you include DeSoto  
20 County, the Delta is united in this version of the plan;  
21 right?

22 A. Yeah, it varies again because now Lincoln  
23 County is outside of it, and it was inside the Delta  
24 initially.

25 Q. Would you say that Lincoln County is in the

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 142

1 Mississippi Delta?

2 A. I'd have to look specifically, as I don't know  
3 the answer to that, if it's a Delta county or not, if  
4 I'd label it that way. I don't know what all the  
5 characteristics are in Lincoln County. I can just see  
6 looking at the two maps, that's one difference right  
7 there.

8 Q. Lincoln County is south of Vicksburg, isn't it?

9 A. It's east.

10 Q. South and east?

11 A. Yeah.

12 Q. Okay. All right. Let's talk about core  
13 retention. And turning back to your January report,  
14 look at Table III.F.5 on page 37 of your January report.

15 MR. WALLACE: On page what?

16 MR. SAVITZKY: 37.

17 MR. WALLACE: Okay.

18 BY MR. SAVITZKY:

19 Q. Oh, excuse me. So your core retention analysis  
20 begins on page 31, paragraph 62, but let's look at that  
21 page 37, and look at that table that you have, it's the  
22 core retention analysis by plaintiff's plan. Let me  
23 know when you're there.

24 A. It may be a while since I have so many papers  
25 here.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 143

1                   MR. SAVITZKY: When we take a break for  
2 lunch, I'll come over and see what I can clean up there.

3 Page 37.

4                   MR. WALLACE: Now you're getting into  
5 somebody else's report, that your problem.

6                   THE WITNESS: Yeah, that's it.

7                   MR. WALLACE: Is this yours? We're missing  
8 20 pages of it.

9                   THE WITNESS: It's in here somewhere.

10                  MR. WALLACE: I'll give you mine.

11                  MR. SAVITZKY: Do you mind if I come around  
12 and sort things out or --

13                  MR. WALLACE: I can give him mine if you  
14 want to get on with --

15                  MS. SAVITZKY: That's fine. Yeah, during  
16 the break, we can sort it out.

17 BY MR. SAVITZKY:

18                  Q. So just looking at Table III.F.5, your analysis  
19 is that Cooper's illustrative plan 1 keeps  
20 74.3 percent of Mississippians in the same district as  
21 they were in in the existing supreme court plan; right?

22                  A. Yes.

23                  Q. And your analysis is that Cooper's illustrative  
24 plan 2 keeps 66.8 percent of Mississippians in the same  
25 district as they were in the existing plan; right?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 144

1           A. Correct.

2           Q. And you say -- and we don't need to turn, I'll  
3 represent to you -- you can turn there if you want. But  
4 I'll represent to you in the first instance in  
5 paragraph 15 of your report you say: "Core retention  
6 for the illustrative plans is low." You use the word  
7 "low." Do you recall that?

8           A. I do.

9           Q. What's the basis for your opinion that keeping  
10 a supermajority of Mississippians in the same district  
11 is a low level of core retention?

12           MR. WALLACE: Objection as being outside the  
13 scope of the court's order, but he may answer.

14           A. It's just the drop-off in the percent of people  
15 that are maintained.

16           Q. Well I guess my question is: Low compared to  
17 what?

18           A. Yeah, that's a good question. Yeah.

19           Q. I mean, did you compare this level of core  
20 retention to --

21           A. No. And that's the case where just I used my  
22 judgment and said it looked low. I was comparing it  
23 more and likely to what the existing plan was.

24           Q. And --

25           A. So it's lower.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 145

1           Q. And just -- so what is the basis for your  
2 judgment that it's low?

3           A. It would be comparing it to the existing plans.

4           Q. Well, the existing plans are a hundred percent  
5 the same as the existing plan. So what's your basis for  
6 saying that this level core retention is low as opposed  
7 to, you know, relatively high? Most of the population  
8 is kept in the same district.

9           A. I hear you. I -- it just looked to me like it  
10 was low when you get down to those numbers, that's all.  
11 Just it's just my person opinion that it appeared to be  
12 low.

13           Q. Someone else could look at these numbers and  
14 say that's a relatively high level of core retention?

15           A. They could.

16           Q. Now, in addition to looking at core retention  
17 in terms of total population in the same district, you  
18 also break down the differences in population  
19 assignments by race between the existing plan and the  
20 illustrative plans; right?

21           A. Yes.

22           Q. And what do you think is the purpose of that  
23 analysis?

24           MR. WALLACE: Same objection as to being  
25 outside the scope of the court's order, but he may

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 146

1 answer.

2 A. Yeah, in the one sense that since the case is  
3 about voting rights and specifically about black voting  
4 rights, I thought it would be useful to look at that,  
5 the issue of race.

6 Q. So on page 33, just flip back a couple pages.

7 On page 33 top of the page you say -- and this is  
8 discusses illustrative plan 1, by way of example, you  
9 say: "Only half of the white, non Hispanic population  
10 from district 1 is retained, while 76.9 percent of the  
11 any part black population is retained." Right?

12 A. Correct.

13 Q. So is your point that the population -- is your  
14 point that comparatively more white population has moved  
15 out of the district? Is that what you're saying?

16 A. That's what the numbers show in a relative  
17 sense, yes.

18 Q. And what is -- is in your view, the relevance  
19 of that in assessing these districts?

20 MR. WALLACE: Objection as to asking A., out  
21 of time; B., asking for a legal opinion. He may answer  
22 if he can.

23 A. It just looks to me like their racial  
24 differentiation was different in the sense of what  
25 percent of one group is moved out, what percent of the

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 147

1 other group that was moved out or stayed, that's all.

2 Q. And discussed before that illustrative plan 1,  
3 district 1 runs north to south on the western side of  
4 the state encompassing the Delta, the counties along the  
5 Mississippi River; right?

6 A. Correct.

7 Q. And that configuration is different from the  
8 sort the Y-shaped configuration of the district 1 where  
9 you have a band of counties going east towards Alabama  
10 that are also included in existing district 1; right?

11 A. That's correct. All the districts generally  
12 speaking in the existing plans run east to west  
13 generally speaking.

14 Q. So, I guess, doesn't it intuitively make sense  
15 that comparatively, more white population would be moved  
16 out of the district if you're moving that band of  
17 counties stretching east to Alabama out of the district  
18 and including the entire Mississippi Delta in the  
19 district?

20 MR. WALLACE: Objection to the vagueness of  
21 'makes sense' in addition to the previous objections,  
22 but he may answer if he can.

23 A. Looking at race as a possible index of things  
24 it would mean that some proportion of people may be  
25 accustomed to having -- having things in common with

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 148

1 elsewhere are now going to be put into whether they're  
2 white or black in places that might have differences.  
3 That's all.

4 Q. I guess I just mean doesn't it sort of make  
5 sense that you would see comparatively more white  
6 population moved out of the district if you're  
7 reconfiguring the district so that while maintaining  
8 equal population, you're uniting the Mississippi Delta,  
9 which --

10 MR. WALLACE: Same objection. He may  
11 answer.

12 A. My answer to that in general is that Northern  
13 Delta may not have as much in common with the Southern  
14 Delta as you think. I'm just pointing out the fact that  
15 you're moving differentially people by racial groups  
16 around in doing this.

17 Q. And just looking at page 28 of Mr. Cooper's  
18 report, and that's Exhibit 9 just for the record.

19 A. Page?

20 Q. Excuse me. Page 28, Figure 12. Let me know  
21 when you're there.

22 A. I'm there.

23 Q. So just looking at this map, you would agree  
24 that this shows illustrative plan 1 overlaying with the  
25 boundaries of congressional district 2, current

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 149

1 congressional district 2; is that right?

2 A. That what it appears to do.

3 Q. And you would you agree that illustrative plan  
4 district 1 was configured similarly to congressional  
5 district 2 in the current congressional plan?

6 MR. WALLACE: Objection, I guess, to the  
7 vagueness of "similarly," but he can answer.

8 A. It is similar.

9 Q. All. Now, is it -- and you can put that one  
10 down for now. Thank you.

11 So in addition to the illustrative plan, you  
12 also did a core retention analysis of the least changed  
13 plans. And we're looking now again at your report --  
14 your January report, page 37, that same chart that we  
15 were looking that. And that would be the summary table  
16 of the core retention analysis. And now looking at  
17 the -- and when you're ready --

18 A. I'm ready.

19 Q. Looking at least change plans, your analysis is  
20 that Cooper's least change plan 1 keeps 92.4 percent of  
21 Mississippians in the same district as the existing  
22 plan?

23 A. Yes.

24 Q. And in least change 2 plan, taking 95.8 percent  
25 of Mississippians in the same plan as the existing plan?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 150

1           A. Yes.

2           Q. And your analysis is: "The changes in Cooper's  
3 least change plans are 'minimal and not substantially  
4 differentiated by race and ethnicity'?"

5           A. Yes, I recall that.

6           Q. So you would if that somebody wanted to  
7 prioritize core retention, Cooper's least change plans  
8 would demonstrate that this can be done while creating a  
9 majority black voting age population supreme court  
10 district 1?

11           MR. WALLACE objection to the -- objection to  
12 the vagueness of "someone," but he can answer the  
13 question.

14           A. That appears to be the case.

15           Q. And you have no basis to think that core  
16 retention is, in fact, a consideration that a  
17 Mississippi map drawer would consider?

18           MR. WALLACE: Objection. Once again, the  
19 only map drawer of -- the only map drawer of Mississippi  
20 supreme court districts in the last 200 years is the  
21 legislature. But he may answer.

22           A. I -- I don't know.

23           Q. And just stepping back, do you think it would  
24 make sense to consider core retention in drawing -- in  
25 redrawing districts that haven't changed for 35 years?

Page 151

1                   MR. WALLACE: Objection to the vagueness of  
2 makes sense, but he may answer.

3                   A. It's a principle regardless of how long they've  
4 been around. If you think, you know, these people have  
5 something in common to politicians or whatever the case  
6 may be that they're voting for, used to going certain  
7 places, yeah.

8                   Q. When you say "used to going certain places,"  
9 what do you mean?

10                  A. Well for example, if you're going to go vote,  
11 you know, where the voting place is going to be and  
12 things like that.

13                  Q. The supreme court lines don't affect where your  
14 polling place is, do they?

15                  A. Well but you're -- if you're now in a new  
16 district, that's what I'm getting at, now where your  
17 vote is in a different district might be the case.

18                  Q. You mean, you wouldn't vote --

19                  A. If you're moving --

20                  Q. Your ballot would reflect a different district?

21                  A. Yeah, that's what I'm getting at. And it might  
22 be that you're not accustomed to people who are running  
23 in that district, you don't know the history, things  
24 like that; where as in the district you were in, you  
25 would. Just bring that up as a possibility.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 152

1           Q. Looking at paragraph 68 of your report on page  
2 36, you opine that your core retention analysis shows  
3 that illustrative plans -- "shows that illustrative  
4 plans 1 and 2 are significantly disruptive to large  
5 numbers of Mississippians across the state in order to  
6 achieve small increase in the percent APB in district 1.

7           A. Correct.

8           Q. So in addition to creating -- in addition to  
9 increasing the percent APB in district 1 the changes in  
10 illustrative plans also decrease the level of population  
11 imbalance between the districts from the existing plan;  
12 right?

13           MR. WALLACE: Objection as out of time. He  
14 may answer it.

15           A. I believe that was the case, yes.

16           Q. And in addition to increasing the percent APB  
17 in district 1, it changes in the illustrative plans,  
18 also maintains a system with zero county splits and zero  
19 precinct splits; right?

20           A. That's correct.

21           MR. WALLACE: Same objection.

22           Q. And in addition to achieving small increases in  
23 the percent APB in district 1, the changes in  
24 illustrative plans also ensure that there are fewer  
25 planning district splits right?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 153

1                   MR. WALLACE: Same objection and relevance  
2 but he may answer.

3                   A. That appears to be the case.

4                   Q. And in addition to achieving small increases in  
5 the percent APB in district 1, the changes in the  
6 illustrative plans also unite the Mississippi Delta as a  
7 communities of interest in the single supreme court  
8 district; right?

9                   MR. WALLACE: Same objection, but he may  
10 answer.

11                  A. If the entire Mississippi Delta is a single  
12 community of interest that's a research question that  
13 needs to be answered.

14                  Q. And assuming it is, then the answer to my  
15 previous question is yes?

16                  A. If -- if that proved to be the case, that there  
17 were enough commonalities to say that it is a community  
18 of interest, it would be the case.

19                  MR. SAVITZKY: So I want to talk about your  
20 cluster analysis next. And I would be, you know,  
21 just -- just stepping out of the questioning for a  
22 second and in terms of our timing, I would be happy to  
23 continue on discussing the January report and the sort  
24 of mapping elements and then break and then discuss  
25 voter turnout. But if you folks would like to take a

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 154

1 break earlier, we can stop here -- we're at the next  
2 stopping place -- or any other time.

3 MR. WALLACE: Whatever is convenient for  
4 Dr. Swanson. We've been going over three hours, but I'm  
5 fine, we can break now or later, take your pick.

6 THE WITNESS: So when would the break about  
7 if it's not now?

8 MR. SAVITZKY: Could be in 20 minutes, in 40  
9 minutes, an hour.

10 THE WITNESS: I prefer to do it now.

11 MR. SAVITZKY: Okay. That's why I asked.  
12 So let's go off the record, then.

13 (A break was taken from 12:07 to 1:03 p.m.)

14 MR. SAVITZKY: Back on the record.

15 BY MR. SAVITZKY:

16 Q. Hope you had a good lunch, Dr. Swanson.

17 A. It was.

18 Q. Okay. And you and Mr. Wallace didn't talk  
19 about the substance of the case during lunch?

20 THE WITNESS: Did we talk about the  
21 substance of the case?

22 MR. WALLACE: I --

23 A. We had a long conversation and parts of it were  
24 about things like that, but it was like a substantive  
25 conversation, so what do you mean by a substantial

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 155

1 conversation?

2 Q. Without get into the details of your  
3 conversation, I just want to make sure there weren't any  
4 sort of instructions about testimony or --

5 A. Oh, no.

6 Q. -- talking about the sort of -- about the  
7 deposition?

8 A. No. He said -- the only thing he said to me,  
9 said to answer questions as truthfully as you can.  
10 That's about the instruction level I got.

11 Q. Noted. And I didn't want to elicit any  
12 specific -- that is good advice.

13 MR. WALLACE: We talked a lot about his  
14 Indian cases. If you want to talk about those, they're  
15 probably in his CV too.

16 MR. SAVITZKY: They are in the CV, but I  
17 don't want to get into them. All right.

18 BY MR. SAVITZKY:

19 Q. So I think what we were -- we were just on the  
20 cluster analysis. So sticking with the January report  
21 which you should still have in front of you, I'd like to  
22 go to page 29 -- or excuse me, page 14, paragraph 19.  
23 And before we get into the cluster analysis, just more  
24 generally -- tell me when you're on paragraph 29.

25 A. Yeah.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 156

1           Q. So you say in paragraph 29: "Compared to the  
2 U.S. as a whole, Mississippi is not as diverse in terms  
3 of race and ethnicity." Do I have that right?

4           A. Correct.

5           Q. And what do you mean when you say "diversity"?

6           A. The majority racial groups in Mississippi are  
7 black and white. And if you look at ethnicity -- and  
8 you understand the way the census bureau uses ethnicity  
9 as opposed to race; correct?

10          Q. Yes.

11          A. So the ethnic distribution is not what you'd see  
12 in a lot of other states as well.

13          Q. So your point is that Mississippi is 36 percent  
14 black, 56 percent white, relatively low percent of  
15 Hispanic folks, so the vast majority of the population  
16 is either black or white?

17          A. Correct.

18          Q. And where does that definition of diversity  
19 come from?

20           MR. WALLACE: Let me -- asleep at the switch  
21 while I was drinking my coffee. This is all outside of  
22 the court's order. And with that objection, he may  
23 answer.

24          Q. And where do you get that definition of  
25 diversity?

Page 157

1           A. Racial diversity is a common one, start looking  
2 at what the distribution is of people by race.

3           Q. Well, would it be fair to say that if we  
4 measured diversity by the percentage of nonwhite people,  
5 non Hispanic white people, Mississippi would be one of  
6 the more diverse states?

7           A. If all you're looking at is two racial groups,  
8 if you categorize and collapse everything into white and  
9 nonwhite.

10          Q. Yes.

11          A. Then it would be a different story.

12          Q. And looking at things that way, Mississippi  
13 would be one of the more diverse states in the country?

14          A. Yeah. I -- I have trouble looking at diversity  
15 from the standpoint of two categories. I would use the  
16 term "distribution" rather than "diversity."

17          Q. How would you use the term "distribution"?

18          A. Well, distribution. So if you flip a coin, is  
19 it 50:50 or is it an unbiased or a biased coin so it's  
20 60:50? So diversity in my head does not mean that  
21 you're looking at what is the distribution between two  
22 possible categories. Diversity to me means there's more  
23 than one or two categories. Do you follow me?

24          Q. I do. And so your metric of diversity is how  
25 many different categories are represented in the extent

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 158

1 to which the population is distributed among many  
2 different categories?

3 A. Thank you.

4 Q. Is that accurate?

5 A. Yes. That's more accurate than I think looking  
6 at just two classes of whatever they might be.

7 Q. Well, whether or not it's more accurate, that's  
8 your definition of diversity?

9 A. Yes.

10 Q. And if we were to define diversity as what is  
11 the percentage of people who are from racial and ethnic  
12 minority groups, then Mississippi is one of the more  
13 diverse states?

14 A. Then that would be your definition. And that  
15 what you just said, if we were to define it, so you  
16 could define it that way.

17 Q. And I know that --

18 MR. WALLACE: And let me object to form.

19 Isn't somebody, everybody from a racial or ethnic group?

20 MR. SAVITZKY: Minority groups.

21 MR. WALLACE: Oh, okay.

22 BY MR. SAVITZKY:

23 Q. So -- and as someone who studies demographics,  
24 reads about demographic issues, would you agree that  
25 colloquially when people talk about the word

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 159

1 "diversity," they're generally referring to the amount  
2 of people with the presence of members of racial  
3 minority groups?

4 MR. WALLACE: Objection to the vagueness and  
5 irrelevance of colloquiality in a law court, but he may  
6 answer.

7 A. I'm not sure what they'd say in terms of  
8 diversity in terms of colloquially. It probably varies  
9 from region of the U.S. to another region. It certainly  
10 would be probably very different in Hawaii than it would  
11 be in Hawaii as opposed to in Mississippi or elsewhere.  
12 So I'm not sure what to say in terms of a general  
13 statement about that.

14 Q. And looking at Exhibit 10, Mr. Cooper's  
15 rebuttal report at paragraph 36. And let me know when  
16 you're there. Do you see it?

17 A. I do.

18 Q. And do you dispute his assertion that: "As  
19 defined by the percentage of the state level population  
20 that is not non Hispanic white, Mississippi is the 12th  
21 most racially diverse state in the nation?"

22 MR. WALLACE: You know, objection as to  
23 being out of time, but you may answer.

24 A. I just would not use the term "diversity" in  
25 that sense. He can, you know, and he says that whatever

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 160

1 the ranking is and whatever he's computed it on, it's  
2 the 12th most racially something in the -- I just  
3 wouldn't use the word "diversity."

4 Q. And so you would not dispute his assertion  
5 that "as defined by the percentage of the state level  
6 population that is not non Hispanic white," using that  
7 definition of diversity, "Mississippi is the 12th most  
8 racially diverse state in the nation?"

9 A. Well, I don't know if it's the 12th most or  
10 not. That's another thing I would have to look up, so I  
11 don't know the answer to it.

12 Q. So you're not disputing it?

13 A. Well, I can't say yes or no. You're asking me  
14 to state -- agree with the fact that I'm not sure if  
15 it's 12th most racially diverse state in the county.  
16 And what year? Are we talking about the 2020 census?  
17 The ACS? I mean, there's a lot of places you could  
18 measure this from. I'm not trying to be obstructive,  
19 but I'm just saying, you know, it's hard for me to  
20 answer the statement just off the top of my head like  
21 that.

22 Q. And, I mean, looking at the paragraph, I think  
23 Mr. Cooper says that it's looking at census data?

24 A. Well, it couldn't be 2020 census data, was it?  
25 I -- you know, I'm just asking.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 161

1 Q. Yes, 2020 census data.

2 A. So he had 2020 census data when he wrote this  
3 report?

4 Q. Yes.

5 A. Okay.

6 Q. The report from October of 2022.

7 A. Okay. I mean, and it could be the case. A lot  
8 of information wasn't released that soon, but I'm -- I  
9 don't know. But the point is, I don't know if it's the  
10 12th most diverse state in terms of whatever measurement  
11 you've got or not because I don't know the source of his  
12 data, I don't -- I haven't looked at a ranking like  
13 that, so it's -- I can't answer the question. I cannot  
14 give you an opinion on it.

15 Q. Have you ever seen your definition of diversity  
16 used as a consideration in the electoral districting  
17 context?

18 MR. WALLACE: Objection. I think it's  
19 asking for a legal opinion, maybe it's a legal fact.  
20 But I will allow him to answer.

21 Q. I'm asking, to be clear, what you have  
22 personally seen in your life and work in this area.  
23 Have you seen this definition of diversity that you  
24 proffered used in the electoral districting context?

25 A. I don't know.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 162

1 Q. You can't recall any instance of it as you sit  
2 here?

3 A. No, I can't recall.

4 Q. Does any source that you are aware of as  
5 someone who's being proofed as an expert in this case  
6 indicates that your definition of diversity is a proper  
7 consideration in the electoral districting contest?

8 MR. WALLACE: Same objection, but he can  
9 answer it.

10 A. So is it -- repeat that one again.

11 Q. Well, let me ask it this way. We looked at  
12 that National Conference of State Legislatures report  
13 that you relied on?

14 A. Okay.

15 Q. And we looked at that congressional research  
16 service report that you relied on; right?

17 A. Yes.

18 Q. And we looked at that redistricting monograph  
19 that Mr. Bryan and Morrison wrote?

20 A. Yes.

21 Q. And did any of those sources indicate that your  
22 definition of diversity is an appropriate consideration  
23 in the electoral districting context?

24 A. Not that I recall.

25 Q. And are you aware of any other sources that

Page 163

1 indicate that your definition of diversity is an  
2 appropriate consideration for the electoral districting  
3 context?

4 A. Not that I recall.

5 Q. So if a map drawer -- and I'm asking you this  
6 not as a legal conclusion but as someone who's being  
7 proffered as an expert in this case -- if a map drawer  
8 were to optimize for this definition of diversity that  
9 you've laid out there, that would mean they would want  
10 to spread the black population among the three  
11 districts, right, so that they were maximally -- each  
12 district was maximally diverse according to your  
13 definition; right?

14 MR. WALLACE: I adopt your objection to your  
15 own question. He can answer it.

16 A. If you're looking at just a race, that's one  
17 way you could do it, but there's other dimensions to  
18 population composition beyond race.

19 Q. Fair enough. And so if a map drawer were  
20 trying to optimize for racial diversity which is what  
21 you were talking about when you said that Mississippi is  
22 not as diverse in terms of race and ethnicity, if you  
23 were trying to optimize for racial diversity, you would  
24 spread the black population among the different  
25 districts?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 164

1                   MR. WALLACE: Same objection. He may  
2 answer.

3                   A. You mean in the sense of someone -- like you  
4 said, a map drawer is trying to do something and looking  
5 for diversity, and all you're looking at is black versus  
6 one other racial category.

7                   Q. Yeah. Or if you're using your definition of  
8 diversity to draw districts in Mississippi, if you were  
9 trying to implement that definition and optimize for  
10 racial diversity, you would spread the black population  
11 across the districts so that all of them had black  
12 population in them; right?

13                  A. Well, if you're just simply looking at the  
14 categories, again, of where I told you white and black,  
15 to me that's -- if you're using two categories, it's not  
16 a good example of the use of the word "diversity." So  
17 you'd want to -- I'd introduce more elements than just  
18 black -- distribution of the black population or the  
19 white population or the Chinese population across all  
20 the countries in Mississippi.

21                  Q. So would you say that your definition of  
22 diversity or at least with respect to racial diversity  
23 is not really something that an electoral map drawer in  
24 Mississippi should factor in?

25                  MR. WALLACE: Same objection as before.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 165

1           A. I don't know. It depends on the task, I guess.  
2 I don't know. I can't speak for other map drawers or  
3 any map drawers. I don't know.

4           Q. Well speaking for yourself and a person who's  
5 offering expert opinions about the qualities of  
6 electoral maps in this lawsuit, are you saying that  
7 one -- that you would consider the racial diversity of  
8 different districts in evaluating the districting plans?

9           A. Along with other measures of diversity, other  
10 measures of how human beings vary.

11          Q. And if you were optimizing for that definition  
12 of racial diversity that you described, that would mean  
13 drawing three black minority districts; right?

14          A. Again, I stress that I'm not looking at it just  
15 in terms of race. So when looking at the human -- you  
16 know, the composition of the population, you're looking,  
17 as I did, beyond race and what diversity might  
18 represent.

19          Q. So you don't think it's a good idea to look at  
20 racial diversity as you've described it?

21          A. I didn't say that. I said I would look at  
22 things beyond that if I'm looking at diversity.

23          Q. You wouldn't look just at racial diversity?

24          A. That's correct.

25          Q. Okay. So let's -- and just -- let's go to

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 166

1 paragraph 31, which I think we're basically on in your  
2 report, your January report, excuse me. This is pages  
3 15 into 16. Just briefly, you know that the supreme  
4 court districts are also the districts that are used for  
5 various other elective and appointive offices in  
6 Mississippi; right?

7 A. I do.

8 Q. And what's the relevance of that in your  
9 opinion as someone who's being proffered as an expert in  
10 this case?

11 MR. WALLACE: Objection to the extent you're  
12 asking him for a legal opinion on relevance, but he may  
13 answer.

14 A. They're important in the sense that they --  
15 that those districts determine a lot of other issues  
16 that go on in the state like the institutes of higher  
17 learning and appointments of boards and the bar and the  
18 bar exam board.

19 Q. Is it your opinion that having one of the three  
20 supreme court districts be majority black voting age  
21 population would decrease diversity in state government  
22 in Mississippi?

23 MR. WALLACE: Again, objection as outside  
24 the scope of the court's order, but he can answer.

25 A. And again, I'd stress that my answer is, it's

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 167

1 beyond race and it's not just affecting the government  
2 in Mississippi. So I think it's important in that  
3 regard whether I was going to use diversity of the  
4 population measuring a lot of dimensions.

5 Q. And just on this point, you're not saying,  
6 you're not opining that having one of the three supreme  
7 court districts be majority black would decrease  
8 diversity in state government?

9 A. I don't know the answer to that question. I  
10 don't know if diverse -- when you say diversity in state  
11 government, people who work for the state? What's the  
12 question you're asking?

13 Q. People who are appointed to -- I mean, you --

14 A. Okay.

15 Q. We're talking in reference to these various  
16 appointed and elected offices.

17 A. Okay. So you're talking about the appointive  
18 offices, not people who are necessarily employes of the  
19 State of Mississippi; right?

20 Q. Right. With respect to those offices that you  
21 mentioned in this part of your report, you are not  
22 opining that the occupants of those offices will be less  
23 diverse if one of the three districts is majority black?

24 A. I don't know the answer, yeah, and I haven't  
25 opined on that, and I'm not in a position to do that

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 168

1 now.

2 Q. Now, you mentioned The Institute of Higher  
3 Learning, and I believe you note in your report that the  
4 12-member body that's appointed by the governor of  
5 Mississippi, 4 members for each of the three districts?

6 A. I believe that's correct. I'd have to look in  
7 my record, but I believe that's correct.

8 Q. Yeah, you say: "In regard to IHL, 4 of the  
9 12-member board of trustees for the state IHL are  
10 appointed by the governor from each of the three supreme  
11 court districts." Do I have that right?

12 A. You do.

13 Q. And you say in paragraph 31, and you mention  
14 this again later as well, you say: "The board has a  
15 diversity statement."

16 A. It does.

17 Q. And you cite Section 102.06 of the board's  
18 policy manual, and you say it acknowledges the value of  
19 the diversity for Mississippi.

20 A. Yes.

21 MR. SAVITZKY: And we'll just mark that.

22 Copy for you, copy for Mr. Wallace.

23 MR. WALLACE: What number?

24 MR. SAVITZKY: This is going to be -- oh.

25 Dr. Swanson, could I please have that back? Thank you.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 169

1 I was quick on the draw there. Here you go, No. 17.

2 BY MR. SAVITZKY:

3 Q. This is the IHL board of trustees' policies and  
4 bylaws that you reference in your report. And then  
5 looking at pages 14 and 15 of this document, we see the  
6 diversity statements that you reference there. Let me  
7 know when you're there and confirm that that's the  
8 diversity statement that you're referencing?

9 A. I'm there.

10 Q. Okay. And looking at this statement and  
11 especially looking at on page 15, you would agree that  
12 the board here adopts a set of goals for higher  
13 education in Mississippi --

14 A. Yes.

15 Q. -- related to diversity?

16 A. Yes.

17 Q. And the goals they adopt are: "One, to  
18 increase the enrollment and graduation rate of  
19 underrepresented students at our institutions"?

20 A. Yes.

21 Q. "Two, to increase the employment of  
22 underrepresented individuals in administrative faculty  
23 and staff positions?"

24 A. Yes.

25 Q. "Three, to enhance the overall educational

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 170

1 experience through infusion of curricular content and  
2 cocurricular programming that enhanced multicultural  
3 awareness and understanding?"

4 A. Yes.

5 Q. "Four, to increase the use of unrepresented  
6 professionals, contractors, and other vendors?"

7 A. Yes.

8 Q. Fair to say that the diversity goals adopted by  
9 IHL focus on representation for "underrepresented  
10 individuals"?

11 A. Yes.

12 Q. Not necessarily on -- strike that.

13 In your view, is anything about these goals  
14 diminished by changing the supreme court district so  
15 that one of them is majority black voting age  
16 population.

17 A. I don't know the answer to that question.

18 Q. Do you offer any opinion that these goals,  
19 these diversity goals, would be diminished in any way by  
20 having one of the supreme court districts be majority  
21 black?

22 A. Are you talking about the four points that's  
23 you just raised?

24 Q. Yes.

25 A. I don't know the answer to that.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 171

1 Q. You don't offer an opinion on that?

2 A. Not at this point in time.

3 Q. And you can put that one aside right in this  
4 pile here.

5 And now let's talk about your cluster  
6 analysis going to paragraph 90 of your report, not page  
7 90 --

8 A. I understand.

9 Q. -- which I just turned to. All right. So  
10 beginning at paragraph 90 of your report, your January  
11 report, you conduct what you call a diversity  
12 evaluation; right?

13 A. I do.

14 Q. And you base that on what you call a cluster  
15 analysis; right?

16 A. Correct.

17 Q. And you say that you conduct this cluster  
18 analysis to evaluate the issue of population diversity?

19 A. Socio and economic diversity is in that too.

20 Q. Well just looking at that first paragraph 90,  
21 the last sentence, you say --

22 A. Population diversity, correct.

23 Q. Right. And to do the cluster analysis, you  
24 took county level data on a number of the different  
25 indices of health and wellbeing from the 2017

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 172

1 Mississippi Health & Hunger Atlas?

2 A. I did.

3 Q. And before we talk about that, why didn't you  
4 use ACS data?

5 MR. WALLACE: All right. Now that you've  
6 asked a question, I'm going to ask -- I'm going to  
7 object to that as being outside the scope of the Court's  
8 order, but he may answer it.

9 A. It's a consistent set of data which may or may  
10 not include some census bureau data in there that goes  
11 beyond what you can get from the ACS.

12 Q. Oh, it includes --

13 A. It may or may not.

14 Q. -- the ACS data?

15 A. It may or may not. I'd have to go back and  
16 look, but I'm sure it has census data of some sort in  
17 there somewhere, but I have to go back and look and  
18 refresh my memory.

19 Q. Was there a more recent version of the  
20 Mississippi Health & Hunger Atlas available?

21 A. Not when I contacted people at Ole Miss. I  
22 got --

23 Q. And you got -- I'm sorry. Please finish.

24 A. I got it from people at Ole Miss, my former  
25 colleagues.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 173

1           Q. And as far as you know, they gave you the most  
2 recent version?

3           A. The only version as far as I know.

4           Q. So you say -- and I think this is in  
5 paragraph 93 of your report on page 37, you say:  
6 "Health and hunger are correlated with socioeconomic  
7 status which in turn is correlated with race." Is that  
8 right?

9           A. Correct.

10          Q. And so in your view, the health and hunger  
11 indices also serve as indices of race and socioeconomic  
12 status?

13          A. They're --

14                   MR. WALLACE: Same objection. He may  
15 answer.

16          A. They're correlated.

17          Q. Okay. And just looking at the last sentence of  
18 this paragraph, you say: "These correlations support  
19 the argument that the health and hunger indices also  
20 serve as indices of race and socioeconomic status."

21          A. Correct, right.

22          Q. And just in layman's terms, is your point that  
23 black Mississippians are worse off in terms of health  
24 and hunger and other socioeconomic metrics than white  
25 Mississippians?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 174

1                   MR. WALLACE: Same objection. He can  
2 answer.

3                   A. It was my point that any group is better or  
4 worse off in terms of that, just some groups may be  
5 higher in some indices and other ones lower in other  
6 indices. That's my point.

7                   Q. What do you mean when you say that: "The  
8 health and hunger indices also serve as indices of race  
9 and socioeconomic status"?

10                  A. Well then in that case, generally speaking,  
11 that if you're -- if you score low on one dimension,  
12 you're probably going to -- it's going to be correlated  
13 with a low score in another dimension.

14                  Q. So -- and specifically, if you score low on the  
15 health and hunger indices in that data you looked at,  
16 you would also be likely to score low on other  
17 indicators of socioeconomic status?

18                  A. Yes.

19                  Q. And you would also be more likely to be black?

20                  A. It depends on the part of the state you're in.  
21 There may be parts of the state where you have rural  
22 white folks, for example, that would probably score  
23 similarly if -- where you're looking at different parts  
24 of state. But yeah, in general, I'd say you're probably  
25 more likely to be black.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 175

1           Q. Let's talk about how you created these indices.  
2 And I'm looking, for reference -- you can do too if you  
3 want, but I'll ask you questions and see if you want to  
4 look. I'm looking, for reference, at page 48 in your  
5 report in Exhibit III.H.1. To create your need index,  
6 you use nine different health need indicators like teen  
7 pregnancy and adult obesity; is that right?

8           A. This is what the people did who put the Hunger  
9 Act list together, they -- the need indicators, this is  
10 what they created, not me.

11          Q. Okay. So you used the indices sort of fully  
12 formed as provided to you in the Health & Hunger Atlas?

13          A. Correct.

14          Q. Okay. So you used a need index from the Health  
15 & Hunger Atlas that includes nine different health need  
16 indicators like teen pregnancy and adult obesity?

17          A. I'd have to look to see exactly which ones I  
18 used, but in general these were the variables that were  
19 available to use as they categorize them from the  
20 report. But I don't recall which ones, if all of them I  
21 used or some that were specific. So we need to go  
22 through that.

23          Q. Well, let me ask you this: Do you know how  
24 these different indices were constructed by the folks  
25 who put together the Health & Hunger Atlas?

Page 176

1           A. They wrote it up in the hunger atlas, and I  
2 don't recall off the top of my head what they said. I'd  
3 have to go back and review the atlas.

4           Q. And do you know the source of the different  
5 metrics that they include in these indices?

6           A. You'd have to go back and look at the -- it's  
7 in there. They have it documented.

8           Q. Do you know that the sources that they used for  
9 these indices are reliable?

10          A. My general impression in my memory based on the  
11 work they did and the people who did it, I don't think  
12 they would pick indices and data that were from sources  
13 that were not reliable. But if you're asking if I went  
14 back and independently verified it for myself, I didn't.

15          Q. Do you know why they created this particular  
16 index of metrics?

17          A. I think it has to do with looking up  
18 Mississippi. So again, if you -- you need to look at  
19 their report to see what they say in terms of what the  
20 goals exactly of the report were.

21          Q. And so you actually use a number of indices.  
22 You have a need index, you also have a hunger -- sorry,  
23 you have a health need index, and you also have a hunger  
24 need index ; right?

25          A. Well when you say I have, those, again, are how

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 177

1 they classified the indicators they used. So I would  
2 say those -- this is a description of what they have in  
3 the report and how they categorized it.

4 Q. So you used the Health & Hunger Atlas's need  
5 index and its hunger -- or excuse me, their -- yes,  
6 their need index -- their health need index, excuse me,  
7 and their hunger need index, you used both of those for  
8 your diversity analysis?

9 A. Yes. I'd have to go back and see if I actually  
10 pulled off the individual elements of each index or used  
11 the index, because I don't recall off the top of my head  
12 what I did. Do you follow me? I can't recall now that  
13 if I used the index in itself or if I used the  
14 individual indicators in there as part of the cluster  
15 analysis.

16 Q. So you don't know whether you used all the  
17 different indicators that are listed here?

18 A. As I said, the last time I read this report was  
19 months and months ago, so I've haven't thought about it  
20 until today when you started asking me questions on it.  
21 So I need go back and look at how I aggregated. So the  
22 basics of that, I -- I would need to go back and review  
23 what I did for it to see what's in there.

24 Q. You say: "These two indices form the input for  
25 the cluster analysis."

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 178

1           A. Okay. Then -- then that's what it has, these  
2 two indices. Where are you at?

3           Q. I'm looking the second to the last sentence in  
4 paragraph 94.

5           A. Then that's what I did.

6           Q. And when you say "these two indices," you're  
7 referring to the need index which includes both health  
8 indicators and hunger indicators, and the second one is  
9 the performance index which includes health and hunger  
10 indicators; right?

11          A. Yes.

12          Q. And so you took all these different indicators  
13 from these two indices, and those are the inputs for  
14 your cluster analysis?

15          A. Well, let's look at Appendix 2, because it says  
16 I list them in Appendix 2. J.

17          Q. And that would be starting at page 94 of your  
18 report? Excuse me, page 93.

19          A. Thank you.

20          Q. Yep.

21          A. Now I can see it. Yeah, I used their indices  
22 in need and the performance indices. Thank you.

23          Q. And again, you didn't select these different  
24 indicators, you just used the two indices that the  
25 Health & Hunger Atlas people put together?

Page 179

1 A. That's correct.

2 Q. Someone could have selected a different set of  
3 indicators to measure health and hunger in Mississippi?

4 A. Well if there are data available, I guess they  
5 could have and want to construct it.

6 Q. You could have constructed one out of ACS data?

7 A. I don't think you're going to get SNAP  
8 enrollment and primary care physicians for 100,000  
9 food-insecure individuals, you know, whatever else may  
10 be in here that's necessarily in ACS data. You may or  
11 may not. But if you did, you'd have to go to a lot of  
12 different reports to find it. And if that's what you're  
13 asking me, and you may end up having to use ACS data  
14 from different time points.

15 Q. And to be clear, I'm not trying to knock you  
16 for, you know --

17 A. Yeah, I understand.

18 Q. -- for not doing that, I'm just -- I want to  
19 make sure this isn't the one definitive set of  
20 indicators that one could use to measure health and  
21 hunger, this is the one that the Mississippi Health &  
22 Hunger Atlas people happened to choose; right?

23 A. That's correct. And relates directly to  
24 Mississippi. And in that sense, it was convenient in  
25 the sense that it's all assembled in one place and

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 180

1 relates to the State of Mississippi?

2 Q. Now, how does this -- how do these indicators  
3 help you measure population diversity?

4 A. From the correlations that I described there in  
5 the report. If you go back to what you just read  
6 about --

7 Q. Well --

8 A. -- in paragraph 93.

9 Q. Uh-huh. So when you say population diversity,  
10 you mean diversity with respect to health and hunger  
11 needs and issues?

12 A. And they're correlated with other forms of  
13 diversity such as race and socioeconomic status.

14 Q. And you say that this analysis: "Enables us to  
15 understand the geographic distribution of population  
16 diversity beyond the raw percent any part black for each  
17 county."

18 A. Yes.

19 Q. So doesn't it only enable us to understand the  
20 geographic distribution of this particular definition of  
21 diversity that you've constructed using the  
22 Health & Hunger Atlas indices?

23 MR. WALLACE: Object to the form as being  
24 outside of the scope of the court's order, but he may  
25 answer.

Page 181

1           A. And to the extent, again, that they're  
2 correlated with these other socioeconomic indicators  
3 including race, I would say they represent a reasonable  
4 index for doing that.

5           Q. And your unit of analysis in conducting this  
6 cluster analysis is the county; right?

7           A. Correct.

8           Q. So what you're seeing is the distribution of  
9 high or low need counties among the different districts;  
10 right?

11          A. Correct.

12          Q. So I think you'd agree with me that there are  
13 some counties in Mississippi that are small in  
14 population and some that are very large in population;  
15 right?

16          A. The needs -- I think you'd have to look at the  
17 report again, and I don't believe they're biased by the  
18 number of people in the county, I believe the need  
19 indicators are set up, and you can see it here where  
20 they're talking about percentages and rates. So in a  
21 sense you're trying to be dimensionalists, you're  
22 certainly going to have a lot more people one category,  
23 say, in Hinds County than you would in some other  
24 smaller county. But when you start looking at things  
25 like rate, it means they're trying to be dimensionalists.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 182

1           Q. But I guess my point is just in terms of what  
2 we can take from your analysis, it doesn't speak to the  
3 distribution of population across the districts, it  
4 speaks to distribution of counties with certain  
5 characteristics across the districts?

6           A. It speaks to the distribution of these  
7 indicators across counties, and what that speaks to  
8 going beyond the -- back to paragraph 93 is the  
9 correlation that they have with socioeconomic and racial  
10 categories.

11          Q. Now, you could have designed some cluster  
12 analysis that looks at the distribution of population;  
13 right?

14          A. How would you do that? Could you give me an  
15 example?

16          Q. Looking at the number of people with particular  
17 health needs or hunger needs?

18          A. Well that's what this does, but it looks at,  
19 again, rates not numbers, so attempts to make it  
20 dimensional so you're not affected by what the  
21 population size is in a given county.

22          Q. Right. And you -- but you could have looked at  
23 the number of people as opposed to the rates that you're  
24 seeing in the particular need?

25          A. Well, the number if people would be affected by

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 183

1 the population counts in the counties then.

2 Q. Right. But your analysis looking at the  
3 distribution of the counties of particular rates doesn't  
4 indicate whether one supreme court district has a very  
5 large county with high need and therefore there are more  
6 unhealthy or hungry people in that district?

7 MR. WALLACE: Object as being out of the  
8 time and argumentative, but you may answer.

9 A. Yeah. Well my take is if you're looking at an  
10 index of need, it's indicating need. And I think that  
11 my take on reading the report that the folks put  
12 together is that they did a good job of putting those  
13 things together. They had good arguments. And I would  
14 direct you to go read their report to see whether or not  
15 you think it's reliable.

16 Q. And so in terms of the analysis you did, you  
17 sort of grouped counties together into three groups,  
18 high need, high performance, which means there's a lot  
19 of health and hunger need, but also fairly strong access  
20 to services or resources; is that --

21 A. Correct.

22 Q. -- right?

23 A. Correct.

24 Q. And then you have a medium need, medium  
25 performance group, and that's about half the counties in

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 184

1 the state fall into that group?

2 A. Correct.

3 Q. Fair to say those counties are maybe a little  
4 bit better off in the sense that somewhat less health  
5 and hunger need?

6 A. Than in cluster 3, the high need, low  
7 performance.

8 Q. And that's what I was getting to.

9 A. Yeah.

10 Q. You also have the high need, low performance  
11 set of counties which means there's a lot of health and  
12 hunger need, but not a lot of resources or access to  
13 resources. Do I have that right?

14 A. You do.

15 Q. So those counties are the worst off?

16 A. Yes.

17 Q. And just looking at that map on page 50 of your  
18 report, those high need, low performance counties are in  
19 purple; is that right?

20 A. Yes.

21 Q. And fair to say that many of them are in the  
22 Mississippi Delta?

23 A. Well, let's count them up. If you're -- when  
24 you say "many," you mean a majority or --

25 Q. Looks like about half. You can count them.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 185

1           A. Well if you count Tunica, Coahoma, Washington,  
2 they're -- those are definitely -- Bolivar, Sharkey,  
3 Issaquena, those are definitely Delta counties, correct?  
4 They're not there. So I'm not sure it's even half, but  
5 it's somewhere around that number.

6           Q. And then the balance of your analysis is  
7 basically looking at the distribution of these counties  
8 in each of the supreme court districts; right?

9           A. Correct.

10          Q. And so looking at page 52 of your report,  
11 Exhibit III-H-3X-c which is a little bar chart at the  
12 bottom, you show that about half of the high need, low  
13 performance counties are in district 3 under the  
14 existing --

15          A. Yes.

16          Q. -- map. And then the other half are divided  
17 between districts 1 and 2?

18          A. Yes.

19          Q. And again, because what you're doing is looking  
20 at the percentage of counties in each district, the  
21 counties you used in the analysis -- and some counties  
22 are larger than others, we don't actually know whether  
23 district 3 or district 2 or district 1 has more hungry  
24 or unhealthy people in it compared to the other --

25          A. Well, if you did that comparison, as I answered

Page 186

1 you before, you're obviously going to have, given that  
2 all else is equal, in a county with a larger population,  
3 you're going to have more in that county of a particular  
4 characteristic. Hence, they used rates in an attempt to  
5 make it dimensionalist so it is comparable. Is the rate  
6 higher in one county or another regardless of the  
7 population size.

8 Q. But I guess my question is, you know, the unit  
9 of analysis here is the county --

10 A. Yes.

11 Q. -- but now you're looking at the distribution  
12 of counties in the supreme court districts and making  
13 what I understand to be a statement about the population  
14 diversity in the supreme court districts; right?

15 A. That would be correct. But in this sense what  
16 you're looking at are the dimensionalist rates that  
17 represent those populations. So if you look at it from  
18 the standpoint of where are needs the highest and the  
19 performance the lowest, and you center correlated again  
20 with socioeconomic status and race, that's what you're  
21 looking at with maps.

22 Q. And I guess what I'm trying to understand is,  
23 looking at the existing plan, you see about half of the  
24 counties you identified as high need and low performance  
25 in district 3, but if they're all very small counties;

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 187

1 and meanwhile district 1, you have a smaller percentage  
2 of those counties, but Hinds County's in district 1. It  
3 may be that there's more health and hunger need in  
4 district 1?

5 A. Well there's always going to be a higher need  
6 in a county that has a higher population. That's not  
7 what I looked at.

8 Q. But the supreme court districts have not equal  
9 but similar populations?

10 A. I hear what you're saying. And what this does  
11 is look at it from a similar perspective. When you're  
12 looking at the rates across there, okay, what --  
13 regardless of what population size is, what do the rates  
14 look like at a county level?

15 Q. Well, couldn't you aggregate the counties and  
16 actually look at the rates among the population as a  
17 whole?

18 A. Let's see. Why would I do that?

19 Q. So that you can compare the populations of the  
20 different districts. If I want to look at teen  
21 pregnancy or obesity rates or SNAP rates, I could  
22 aggregate the information for each county up to the  
23 district level, and I could see which of these districts  
24 has higher rate of SNAP use.

25 A. Now I see what you're getting at. Okay. So

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 188

1 yeah, if I had the data. And I didn't have the raw data  
2 to be able to do that with the data are and the report  
3 are given rates by county. So without knowing what all  
4 the numbers are in there, I'd have to go reconstruct and  
5 put them up at the district level. That's what you're  
6 asking --

7 Q. Yes.

8 A. -- and I didn't do that.

9 Q. And you didn't do that?

10 A. That's correct.

11 Q. So -- and without doing that, you can't speak  
12 to the similarity or difference of the districts in  
13 terms of those different metrics?

14 MR. WALLACE: Objection. Same objection as  
15 before and objection as to vagueness, can't speak to the  
16 differences, did you say? I'm -- I lost your meaning.

17 A. I think I follow your meaning. But the point  
18 is, I looked at counties.

19 Q. So --

20 A. And if you reaggregate the lines by county,  
21 you're starting to see from the county perspective what  
22 the numbers are by that is you can tell.

23 Q. And looking at page 55, we're looking at  
24 illustrative plan 1, same bar chart. And you say that  
25 under this illustrative plan 1: "The majority of the

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 189

1 high need, low performance counties are now in district  
2 under Cooper's illustrative plan 1."

3 A. Yes.

4 Q. And that -- again, that makes sense because as  
5 we've discussed, illustrative district 1 includes all  
6 the Mississippi Delta, all the counties north, south  
7 along the Mississippi River, and a lot of the high need,  
8 low performance counties, some of which are very small  
9 in population, are in that area.

10 A. So as you asked before, it means it's  
11 correlated with race and socioeconomic status, an  
12 indicator of that.

13 Q. And the result -- I mean, your analysis shows  
14 that what -- one of the things that Mr. Cooper's map  
15 does is that more of these counties with that high level  
16 of need and low level of resources are being grouped  
17 together in district 1?

18 A. Correct.

19 Q. So Mr. Cooper's illustrative plan 1 is grouping  
20 together counties with similar socioeconomic needs and  
21 interests?

22 A. And making it less diverse.

23 Q. But you agree he's grouping together counties  
24 with similar socioeconomic needs and interests?

25 A. I just said that.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 190

1           Q. And then just same question looking at your  
2 page 58, again, you're showing 69 percent of the  
3 counties in that high need, low performance category are  
4 in district 1 under illustrative plan 2; is that right?

5           A. That's correct.

6           Q. And again, what we're seeing is that Cooper  
7 illustrative plan 2 in grouping together counties with  
8 similar socioeconomic needs and interests?

9           A. Making it less diverse, yes.

10          Q. And we talked about community of interest  
11 before. From a map drawing perspective -- I ask you  
12 this as a person who is being proffered as an expert in  
13 this case -- what do you think is more in line with  
14 those districting principles that we discussed earlier?  
15 What --

16           MR. WALLACE: Well, I'm -- go ahead. Let me  
17 let you finish your question. I thought you had, and  
18 then you kept going so pardon me.

19          Q. What do you think is more in line with the  
20 districting principles we discussed earlier, grouping  
21 together areas that share common needs and interests or  
22 grouping areas together in a way that maximizes the  
23 diversity and spread of those interests among different  
24 defenses?

25          A. To answer that question --

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 191

1                   MR. WALLACE: Let me get my objection in.

2       He's asking for -- first of all, he's vague; second of  
3       all, he's asking for legal opinions; and third of all,  
4       it's outside the scope of court's order. And having  
5       said that, you may continue your answer.

6                   A. As you said earlier, it -- there's a lot of  
7       tradeoffs when you're looking at different metrics and  
8       measurements in doing this. And that might be one of  
9       the tradeoffs you're looking at.

10          Q. And having looked at some of those districting  
11       principles and offered opinions about them in your  
12       expert report in this case, what do you think is more  
13       consistent with the principles that are reflected in the  
14       Congressional Research Service Report, Redistricting  
15       Manual, National Conference of State Legislatures?

16                   MR. WALLACE: Same objection.

17          A. They emphasize more of the issues I think  
18       you're getting at as opposed to the diversity issue.

19          Q. They emphasis grouping together areas with  
20       common interests and needs?

21                   MR. WALLACE: Same objection. He may  
22       answer.

23          A. Yeah. And I would again go -- aren't all those  
24       groupings -- again, I use them as a guideline, but  
25       aren't they generally for congressional districts; is

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 192

1 that the case?

2 Q. The National Conference of State Legislatures  
3 report that you cited related to considerations for  
4 state legislative and other districts as well, didn't  
5 it?

6 A. That -- I mean, when I say congressional,  
7 that's what I meant, state and federal. I don't think  
8 there's anything in there about a supreme court  
9 district.

10 Q. Right. And the Redistricting Manual from  
11 Morrison and Bryan, is that similarly applicable?

12 A. Well again, I -- how many -- I didn't see  
13 things specifically on supreme court cases in those  
14 materials, so that's why I used them as a guideline.

15 Q. And is there something about supreme court  
16 districts that makes this diversity metric that you're  
17 discussing more relevant than the legislature district?

18 A. Well, you read it yourself --

19 MR. WALLACE: Same objection. He may  
20 answer.

21 A. You heard from the IHL, said their -- one of  
22 the goals is to be more diverse.

23 Q. I mean, did anything in the IHL statement  
24 describe diversity in the way that you are discussing it  
25 now?

Page 193

1           A. One of -- the lead-in statement before it  
2 listed the four points talked about cultural diversity.  
3 And so cultural diversity covers a lot of ground.

4           Q. Other than the IHL policies and bylaws that we  
5 discussed, is there any other reason why this diversity  
6 metric?

7           A. Well there's --

8                   MR. WALLACE: Same objection. You may  
9 answer.

10          A. There was the court case that I saw too on it.

11          Q. The court case that used the word "diversity"?

12          A. Yes.

13          Q. And you don't know as you sit here whether that  
14 court case was using the word "diversity" in the way  
15 that you mean the word "diversity"?

16          A. I do not know.

17          Q. Anything else?

18          A. Not that I can think of at this time.

19          Q. So let's talk about your analysis of polling  
20 places, and turning to the paragraph 81 of your report.  
21 Starting at paragraph 81, you have a voting age  
22 population polling place spacial analysis?

23          A. Correct.

24          Q. And in paragraph 81 you ask: "What are the  
25 differences in proximity, the differences in distance,

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 194

1 and the distance of black voting age population to  
2 current polling stations compared to all voting age  
3 population, and in a particular, white non Hispanic  
4 voting age population." Is that right?

5 A. Correct.

6 Q. And you say: "My hypothesis for this question  
7 was that if the black voting age population were being  
8 systematically disenfranchised by the State of  
9 Mississippi, a symptomatic indicator of that would be  
10 seeing fewer of them close to polling places and more of  
11 them of a greater distance from polling places."

12 A. Correct.

13 Q. How did you form that hypothesis?

14 A. Just in general knowing what propensity, close  
15 to things, mean.

16 Q. Can you say more about that?

17 A. Yeah. So for example, I've done studies of  
18 where graduates from high school go to college in the  
19 State of Washington, and propensity is a big indicator  
20 of it. So many of the freshman or transfer students who  
21 go to Western Washington here in Bellingham, Washington  
22 are from Western Washington, they're not from Southeast  
23 Washington. Many of the students who --

24 MR. WALLACE: Did you mean "propensity" or  
25 "proximity"? I'm looking at your --

Page 195

1           A. Yeah, proximity. I'm sorry. Thank you. So  
2 that's what I mean. So, you know, if you're close to  
3 something, you're probably more likely to be able to do  
4 it or go there. And there's not -- I can't cite all the  
5 literature off the top of my head, but there's a lot of  
6 literature, probably in marketing and a lot of other  
7 fields it's that. That's one of the reasons why does  
8 Target site stores in certain places.

9           Q. Would you agree the decision to leave your  
10 family for the first time and go to college somewhere  
11 close to home rather than far away when you're away four  
12 years is a little different than whether or not you're  
13 going to go vote on a Tuesday; right?

14          A. But it's a little different than deciding  
15 whether you're going to go buy gasoline or clothes too,  
16 but as I said, there's -- without being able to speak to  
17 it all in my head, there's a lot of literature on how  
18 relatively close you are to things that triggers whether  
19 or not you're taking advantage or doing it. That's the  
20 point. So yeah, there is a lot of variation of why  
21 people are doing it, but you're close to something is a  
22 determinant of whether or not you do it.

23          Q. When you put up a Target store, there's a big  
24 Target logo and a big sign that says Target on it;  
25 right?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 196

1           A. As far as I know there is, yeah.

2           Q. But there isn't one on a polling place, is  
3 there?

4           A. No. And I just said there's a lot of  
5 differences in all these things, but the -- is the word  
6 propinquity? That might be it. How close you are to  
7 things is one of the determinants of whether or not you  
8 take advantage or use them or don't. It's not the only  
9 thing, but it's one of them.

10          Q. But you would have to know where something is  
11 in order to -- in order for that logic to apply?

12          A. Well I guess you could stumble across it if  
13 you're doing a random search.

14          Q. On a polling location, you'd have to stumble  
15 upon it on a Tuesday in November; right?

16          A. Do they move around all the time?

17          Q. Well, that's my next question. Do you know who  
18 decides polling locations in Mississippi?

19          A. No, I don't.

20          Q. So when you say that --

21          A. It's probably at the county level, but I'm, you  
22 know, just saying I don't know.

23          Q. So when you say that polling place proximity  
24 could be evidence of systematic disenfranchisement,  
25 that's despite the fact that locations of polling places

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 197

1 is decided, you would think, at a local level?

2 A. Yes.

3 Q. And do you know whether there are racial  
4 disparities in access to vehicles in Mississippi that  
5 might affect the ability of Mississippians to get to the  
6 polls on election day?

7 MR. WALLACE: Same objection. You may  
8 answer.

9 A. There might be, but people are people, so there  
10 may be different ways to overcome some of those  
11 disparities.

12 Q. Well -- and just looking at Mr. Cooper's  
13 responsive declaration, Exhibit 10, paragraph 34 --

14 A. In exhibit?

15 Q. It's Exhibit 10, but it's paragraph 34 of the  
16 responsive declaration. I just want to make sure you're  
17 looking at the responsive declaration.

18 A. That's Exhibit 9. This is 12.

19 Q. We want Exhibit 10.

20 MR. WALLACE: This one?

21 MR. SAVITZKY: You've got it.

22 BY MR. SAVITZKY:

23 Q. And looking at paragraph 34 --

24 A. Yes.

25 Q. -- Mr. Cooper says: "Statewide, 10 percent of

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 198

1 black households do not have a car versus 4.3 percent of  
2 white households."

3 A. I see it.

4 Q. Do you have any reason to dispute that?

5 A. No.

6 Q. He says: "The racial disparity expands to  
7 12 percent versus 4.5 percent in the Delta region." Any  
8 reason to dispute that?

9 A. No.

10 Q. Do you know if there are racial disparities  
11 between who has the type of job where they can get off  
12 work and vote on a Tuesday in Mississippi?

13 A. I do not know.

14 Q. Based on the discussion we've had about  
15 socioeconomic indicators, is it likely that black  
16 Mississippians are less likely to be able to take off  
17 work and vote on a Tuesday?

18 A. I'd look at it as a research question.

19 Q. Do you know whether there are racial  
20 disparities in Mississippi in terms of single-parent  
21 households that might affect the ability to get to the  
22 polls and vote on a Tuesday in light of work and  
23 childcare obligations?

24 A. Differentially than other population racial  
25 groups? Is that what you're asking me?

Page 199

1           Q. Correct. Are there more black single-parent  
2 households than white single-parent households in  
3 Mississippi?

4           A. I don't know exactly if that's the case or not.

5           Q. And just looking at that exhibit that we  
6 just -- looking at Mr. Cooper's responsive report in  
7 paragraph 33, he says: "Other voters may have  
8 responsibilities that make it impossible to walk. 51.4  
9 percent of the black female head of households with  
10 children live in poverty compared to 37.4 percent of  
11 their white counterparts." Any reason to dispute that?

12          A. Does he give a source? Again, I don't have any  
13 reason to dispute it, but I just wonder what the sources  
14 are and how consistent they are, that's all.

15          Q. I can represent to you that it's all ACS data.

16          A. Okay. And then the question is, again, you  
17 know, the sample sizes and whether or not they're  
18 statistically different. So if you just pull things off  
19 the ACS and start comparing them, depending on where  
20 you're at and depending what the census bureau does, I  
21 would prefer not to answer that until I actually saw the  
22 size of the sample, what the margins of errors are on  
23 it, because it may be the case in some of these  
24 comparisons that there's no statistically different --  
25 significant difference. Do you follow me? So I don't

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 200

1 know in advance, just asked -- if you're asking about  
2 the state as a whole and that's what he's arguing, for  
3 the state as a whole, then it may be the case there is  
4 one.

5 Q. And by the way did you do a test of  
6 significance, a T-test or something else to look at your  
7 analysis of polling place proximity?

8 A. No.

9 Q. By the way, do you know if there are racial  
10 disparities in Mississippi in terms of how long people  
11 have to wait to vote at the polls in Mississippi?

12 A. I don't know.

13 MR. SAVITZKY: And we can mark right now --  
14 it's a little out of order, but this is just where it  
15 is. This is Dr. Burch's rebuttal report, marking it as  
16 Exhibit 18. There should be a copy for you, Mike, but  
17 I'm not seeing it. Give you mine.

18 BY MR. SAVITZKY:

19 Q. And looking at pages 12 to 13 of Dr. Burch's  
20 rebuttal report -- let me know when you're there.

21 A. I see it.

22 Q. Looking at the bottom, she says: "Further  
23 analysis of the CES which I report shows that among  
24 validated Mississippi voters, 18.9 percent of white  
25 voters report they waited for more than 30 minutes to

Page 201

1 vote compared to 40.7 percent of black voters." Any  
2 reason to despite that?

3 A. Yeah, there is.

4 Q. Any reason other than the criticisms of the CES  
5 that we'll talk about presently?

6 A. That I don't know. But definitely I'd start  
7 with CES.

8 Q. All right. And we'll get to that. And hang on  
9 to -- you can put Dr. Burch's rebuttal aside, but don't  
10 get let it get too far.

11 So you can't say whether the various racial  
12 disparities we talked about including the ones that are  
13 reflected in ACS might negate any theoretical advantage  
14 in terms of polling place proximity for black  
15 Mississippians?

16 A. If you're asking me right off the top of my  
17 head, my answers were, I think, pretty consistent saying  
18 for the most part, some of them are research questions,  
19 so they have to be looked into in order to answer the  
20 full question.

21 Q. And looking at paragraph 82 of your report, you  
22 say: "While each of Mr. Cooper's illustrative and least  
23 change plan increases the percent of the black  
24 population in district 1, I want to know if the  
25 increases he achieved came at the expense of black voter

Page 202

1 proximity to the polls." What do you mean by that?

2 MR. WALLACE: Same objection as to outside  
3 the scope of the court's order, but he may answer.

4 A. Yeah, it looks on average if you change the  
5 counties around and you're moving black populations  
6 around, what does it look like in terms of proximity to  
7 the polls.

8 Q. Well, why would putting different counties into  
9 supreme court districts change the proximity to the  
10 polling places which are intra county?

11 A. Yeah. Well, it's a question I asked.

12 Q. Well, I guess my question is: How could it  
13 possibly change the proximity of people to polling  
14 places to put them in one supreme court district or  
15 another if all the supreme court districts are made up  
16 of whole counties?

17 A. It's a question that I asked. So -- and again,  
18 I stress that I don't know exactly where the -- how they  
19 were placed initially.

20 Q. Would you agree that whether a county is in one  
21 supreme court district or another doesn't have any  
22 bearing on where your polling place is?

23 A. That I don't know.

24 Q. You say: "If Mr. Cooper's plans increase the  
25 number and proportion of blacks but he moved close poll

Page 203

1 proximity blacks out of district 1 and moved distant  
2 poll proximity blacks into district 1, one could argue  
3 that the actual impact of such plans would be to  
4 increase black voter disenfranchisement and risk fewer  
5 blacks actually turning out to vote."

6 A. Yes.

7 Q. What is the basis -- what is your basis for  
8 suggesting that changing the supreme court lines to draw  
9 a black majority district would increase black voter  
10 disenfranchisement and risk fewer blacks actually  
11 turning out to vote?

12 A. Well maybe that the average citizen's in a  
13 county, not in supreme court district 1, is different  
14 than a county that is in supreme court district 1 that  
15 has moved out of it. So for example, what -- pick a  
16 county. In every county in every state are the polling  
17 distances for any given population exactly the same,  
18 they probably vary. So urban areas are probably in a  
19 closer proximity, correct, would you agree, than you  
20 would be in rural areas. So that's one example of how  
21 they might change. So even there it's at county level,  
22 it may be the case that by moving them around, you've  
23 now put people that were on average farther away from a  
24 voting poll into this new district.

25 Q. Did you do any analysis to demonstrate that

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 204

1 so-called close poll proximity blacks are more likely to  
2 vote than so-called distant poll proximity blacks?

3 A. No.

4 Q. Now in your report, did you ever go back and  
5 answer the question that you posed and offer an opinion  
6 or a conclusion about whether the actual impact of  
7 Mr. Cooper's illustrative plans would be to increase  
8 black voter disenfranchisement and risk fewer blacks  
9 actually turning out to vote?

10 A. I'd have to look in the report again, so I  
11 don't recall off the top of my head if I did.

12 Q. It's not that many paragraphs, if you want to  
13 just take a quick look.

14 A. Sure, I'll look here.

15 Q. It's the section between paragraphs 81 --

16 A. Or even in the executive summary.

17 Q. -- or 89.

18 A. Yeah. I'm looking at the executive summary.

19 Paragraph, what was it, 9?

20 Q. 81 through 89 is your discussion of this issue.

21 A. Thank you.

22 (Witness reviewing exhibit.)

23 A. So no, I didn't look at it by district, I  
24 looked it on average for the state as a whole.

25 Q. So you didn't go back and look at what you

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 205

1 called "the question" of whether the increases Cooper  
2 achieved came at the expense of black voter proximity to  
3 the polls?

4 A. That's correct, I did not. Thank you.

5 Q. Now let's talk about the analysis that you did.  
6 How did you go about calculating the voting age  
7 population living within a half mile of their polling  
8 place?

9 A. Let's see how it's described here. This is  
10 done using the geospatial stuff that Tom Bryan has  
11 access to, and I asked him to give me ideas about how  
12 far people were from polling places. So when he got the  
13 list of where they were located, then he could do the  
14 GIS magic with VAPs and VAP by race within certain  
15 distances of those places. So that's how they're done.

16 Q. So Bryan GeoDemographics did this analysis?

17 A. Oh, absolutely. Yeah.

18 Q. What parameters did you give them?

19 A. Just what I told you. I said that I'd like to  
20 see what the distances are to polling places and, you  
21 know, if it's -- do you want to do categories on it that  
22 make sense or if you want just give me average  
23 distances, and we discussed it a bit, and I said, yeah,  
24 those look good in terms of what percent might be within  
25 a quarter mile, half mile, up to a mile or so. And that

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 206

1 was done in conjunction with the data that were  
2 available, how hard it was to assemble it and do it.

3 Q. And did you count the population of any census  
4 block that contains a polling place as living within a  
5 half mile of the polling place?

6 A. I can't remember the exact details and how it  
7 was done. When you're looking at census blocks, that's  
8 the lowest geography you get and there are ways that I  
9 know in GIS you split those using different algorithms.  
10 And that's likely what he did to do it, but I don't  
11 recall the details.

12 Q. And the census block can be larger than a mile  
13 around; right?

14 A. It can, depending what the population of where  
15 it's at, what makes up natural boundaries for one.

16 Q. So if you count on the population of the census  
17 block containing polling places, living within a half  
18 mile of that polling place, some of the people in that  
19 census block might actually live more than a half mile  
20 away from the polling place?

21 A. But again, I stress that there are algorithms I  
22 know GIS people use that will try and accommodate that  
23 so you're not just doing something that gross. Do you  
24 follow me? And what they do exactly, I don't know.

25 Q. And you don't know what Bryan GeoDemographics

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 207

1 did in this case?

2 A. I don't.

3 Q. You don't know whether he used an algorithm to  
4 make that distinction between people in the census block  
5 that are actually within the half mile and people who  
6 are actually outside the half mile?

7 A. I don't.

8 Q. And let's just look at Mr. Cooper's responsive  
9 report. Again, it's Exhibit 10. You should have it?

10 A. On report 9 or 10?

11 Q. 10.

12 A. Thank you.

13 Q. I'm a little concerned that your Exhibit 10 has  
14 gone missing here.

15 MR. WALLACE: I have a 10 if you need it.

16 THE WITNESS: Thank you.

17 MR. SAVITZKY: Do you have it?

18 MR. WALLACE: Yeah. Tell me what paragraph  
19 you want.

20 MR. SAVITZKY: I'm looking at page 12.

21 BY MR. SAVITZKY:

22 Q. And what Mr. Cooper does here in Figure 4 is,  
23 shows the census blocks which are in blue and then the  
24 half mile radii which are the circles there. So you can  
25 see there's significant amounts of those census blocks

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 208

1 that are outside the half mile radius of the polling  
2 place; right?

3 A. Correct. I can see that.

4 Q. Okay. And did you review Mr. Cooper's analysis  
5 in his report of this polling place proximity analysis  
6 that you did?

7 A. I remember reading through this and putting it  
8 aside.

9 Q. All right. And just starting at paragraph 24  
10 on page 11 of Mr. Cooper's responsive report, Mr. Cooper  
11 used geospatial analysis to calculate that actually  
12 26.3 percent of black voters live within a half mile of  
13 their polling place; right?

14 A. That's what it says here in paragraph 24.

15 Q. And do you dispute his analysis?

16 A. I've got no reason to dispute or not dispute  
17 it.

18 Q. And Mr. Cooper conducted -- after conducting  
19 this analysis said that the Bryan GeoDemographics  
20 analysis erroneously does count the entire VAP living in  
21 a given census block as being half mile from a polling  
22 place?

23 MR. WALLACE: Where does he say that?

24 Q. Paragraph 25.

25 MR. WALLACE: It's in 25?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 209

1           A. Yeah, I saw it.

2           Q. Okay.

3           A. That's what he says.

4           Q. And you don't have any reason to dispute that?

5           A. Not at this time.

6           Q. All right. So just a few questions about  
7           socioeconomic analysis performed by Mr. Cooper and  
8           Dr. Burch. Looking at Exhibit 9, Mr. Cooper's October  
9           report and beginning on page 36, Mr. Cooper analyzes the  
10          socioeconomic profiles of the State of Mississippi using  
11          five year ACS data. Let me know when you're there.

12          A. I'm there.

13          Q. You don't dispute any of his analysis with  
14          respect to the ACS data there?

15          A. Let me read through this. So it appears it's  
16          from the 2021 ACS data, singular data for the State of  
17          Mississippi. Okay. No, I have no reason to dispute  
18          that those are numbers he took from the single year 2021  
19          ACS data.

20          Q. Thank you. And by the way, just because it  
21          came up earlier, looking at the top of page 37, it does  
22          like seem you get SNAP participation rates with the ACS?

23          A. It looks like it, yes.

24          Q. And in paragraph 64 of his report on page 36,  
25          Mr. Cooper says: "In Mississippi, African Americans

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 210

1 trail non Hispanic whites across most key indicators of  
2 socioeconomic wellbeing." Do you dispute that?

3 A. Based on what's in the ACS, no.

4 Q. And in paragraph 66 and 67 of Mr. Cooper's  
5 report, there's the last two paragraphs, he explains  
6 that he reviewed and prepared charts of the same ACS  
7 data for counties and municipalities and that  
8 socioeconomic disparities by race also exist at the  
9 county and municipal levels throughout Mississippi. Do  
10 you dispute that?

11 A. Well, that's one where because it's at the  
12 county level and because of the sizes, I'd want to look  
13 at what the margins of error are before I made those  
14 statements. I trust it at the state level that the  
15 margins of error are sufficiently small, it's not an  
16 issue, but you see it down some of the counties, it  
17 could be.

18 Q. You dispute that the ACS data reflects those  
19 disparities?

20 A. That I don't dispute, it's just a matter of how  
21 you interpret it and if -- if the margins of error, if  
22 they're 90 percent margin of error overlap the mean of  
23 the other group, then there's no statistically  
24 significant difference. So you can't make the  
25 statement. Do you follow me?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 211

1           Q. Understood. And setting aside whether or  
2 not -- setting aside any issues with respect to the sub  
3 sample size for counties or municipalities, with respect  
4 to ACS data for Mississippi, you don't dispute that that  
5 is what the ACS data is --

6           A. No, I don't have any reason to believe  
7 Mr. Cooper put down other data in there other than what  
8 he took out of it.

9           Q. And let's now mark -- we did it a little out of  
10 order because her rebuttal is already marked, but the --  
11 mark Dr. Burch's report now as Exhibit 19.

12          A. I've got this piece of paper handed to me with  
13 nothing on it. I don't know what it is.

14          Q. That's Dr. Burch's rebuttal report.

15          A. Okay.

16           MR. WALLACE: Have we got one marked?

17           MR. SAVITZKY: Should be 18. Here's 19.

18           THE WITNESS: Here's 18.

19           MR. SAVITZKY: Okay.

20           THE WITNESS: That was just some other piece  
21 of paper, same thing, I guess. Okay. That's.

22           MR. WALLACE: We do have 19 for me? I've  
23 got 18.

24           MR. SAVITZKY: 19 for you, 19 for me. All  
25 right. We all have 18 and 19 which we'll be looking at

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 212

1 more presently.

2 BY MR. SAVITZKY:

3 Q. But just for now looking at what's been marked  
4 as Exhibit 19, on pages 3 through 10 of this report, Dr.  
5 Burch analyzes educational markers like student test  
6 scores and school district segregation, education  
7 attainment by race. You don't dispute her analysis of  
8 racial disparities in education in Mississippi on that  
9 front?

10 MR. WALLACE: Objection to being outside the  
11 scope of the court's order, but he may respond if he  
12 can.

13 A. In general, no. I'd have to look at some of  
14 the details on where she got the data and what she's  
15 pulling off to make a definitive statement. But in  
16 general, no.

17 Q. And looking at pages 10 to 13 of this report,  
18 starting at page 10, Dr. Burch analyzes racial  
19 disparities with respect to income, poverty and wealth  
20 looking at, for example, household income, access to a  
21 car, poverty, unemployment.

22 A. I mean, again, I --

23 MR. WALLACE: He didn't ask a question yet.

24 Q. You don't dispute her analysis of those racial  
25 disparities with respect to income and poverty?

Page 213

1                   MR. WALLACE: And I have the same objection  
2 to that question, and he may answer it.

3                   A. The answer is, there's no reason for me to  
4 dispute what she's found from the current population  
5 survey --

6                   Q. And I believe --

7                   A. -- American Community Survey, and so on.

8                   Q. And looking at pages 13 to 16, Dr. Burch  
9 discusses racial disparities in housing, for example,  
10 home ownership, looking at ACS data there for home  
11 ownership by race. You don't dispute her analysis of  
12 racial disparities with respect to housing in  
13 Mississippi?

14                  MR. WALLACE: Same objection. He may  
15 answer.

16                  A. Well, I don't -- I haven't -- I'm not looking  
17 at her analysis in depth, but I don't dispute the data  
18 she got from the American Community Survey as being  
19 reasonably accurate. The same from the Current  
20 Population Survey for the state as a whole.

21                  Q. Or for example, I'm just drilling down on  
22 page 16, the last sentence, last two sentences in her  
23 report, she says: "The 2019 report by the Mississippi  
24 Home Corporation, a state entity, found that black  
25 people in Mississippi were denied mortgage loans more

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 214

1 frequently and faced discrimination in rental markets."

2 MR. WALLACE: Where is that?

3 MR. SAVITZKY: This is the second to the  
4 last sentence in the second to the last paragraph on  
5 page 16 of Exhibit 19, Dr. Burch's October report.

6 MR. WALLACE: All right. Same objection.

7 He may answer.

8 A. No. I've got no reason to dispute it.

9 Q. And she goes on, she says: "Other studies have  
10 also shown that black Mississippi applicants faced  
11 discrimination in home lending, discriminatory practices  
12 affect ability of black renters to find rental housing  
13 in Mississippi." And that's from the National Fair  
14 Housing Compliance, DOJ?

15 MR. WALLACE: Same objection. He may  
16 answer.

17 A. My answer is the same as the last time.

18 Q. No dispute?

19 A. No dispute.

20 Q. Okay. And looking at pages 16 through 18 of  
21 Dr. Burch's report, she discusses racial disparities  
22 with respect to health, for example, in heart disease,  
23 access to healthcare, access to a primary doctor, health  
24 insurance. You don't dispute her analysis of racial  
25 disparities with respect to health in Mississippi?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 215

1                   MR. WALLACE: Same objection. He may  
2 answer.

3                   A. If she's summarizing the data that is shown in  
4 the tables given the sources that they're from, I have  
5 no reason to dispute it.

6                   Q. And looking at pages 18 to 20 of her report,  
7 Dr. Burch analyzes racial disparities with respect to  
8 criminal justice. And like you, she looks at the racial  
9 makeup of the correctional facility populations and,  
10 just looking at her chart here on page 19, looks like  
11 she got a very similar result to you in terms of  
12 60 percent of the prison population being black?

13                  MR. WALLACE: Same objection. He may  
14 answer.

15                  A. And again, based on the fact that her analysis  
16 are really descriptive, verbal descriptions of what's in  
17 the tables, I have no reason to dispute it.

18                  Q. You don't dispute the political science  
19 literature discussed in Dr. Burch's report that voting  
20 participation is generally correlated with socioeconomic  
21 wellbeing?

22                  MR. WALLACE: Same objection, and perhaps  
23 outside the range of a demographer's expertise, but he  
24 may answer.

25                  A. Given my knowledge of it, I don't dispute it.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 216

1           Q. You don't dispute that this letter -- this  
2 literature shows generally that when a person has more  
3 education, more income, more health, they're more likely  
4 to vote and participate in politics?

5           A. In general, I think that's -- I agree with  
6 that.

7           Q. And in light of that general rule, it would be  
8 a reasonable hypothesis that if there was racial  
9 minority group in a jurisdiction that had less  
10 socioeconomic wellbeing, less education, less income,  
11 less health, they would have lower levels of voting and  
12 participation?

13           MR. WALLACE: Same objection. But he may  
14 answer.

15           A. And my answer to that again is that it depends  
16 on what racial group and what part of country and when  
17 and where you're looking at it. It's a research  
18 question.

19           Q. In light of -- let me ask it differently, then.

20           It would be a reasonable hypothesis in light  
21 of that general rule that the correlation between  
22 socioeconomic wellbeing and voting and political  
23 participation, that black voters in Mississippi who have  
24 less socioeconomic wellbeing, less income, less  
25 education, less health, less access to housing would

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 217

1 have lower levels of voting and political participation?

2 MR. WALLACE: Same objection. He may  
3 answer.

4 A. Again, it's -- it's not an easy question to  
5 answer from the standpoint of it's still pretty general.  
6 So it may be that certain areas of the state, people who  
7 are in exactly the same condition vote at a much higher  
8 rate than people very similar, exact same  
9 characteristics elsewhere.

10 Q. Well my question is: Given all of this  
11 information that we just discussed that you don't  
12 dispute from the ACS, from other reputable sources  
13 showing the racial disparities across many different  
14 indicators and given the political science literature  
15 that you don't dispute that socioeconomic wellbeing and  
16 voting are correlated, it would be a reasonable  
17 hypothesis that black voters in Mississippi vote less  
18 and participate less than white voters in Mississippi?

19 MR. WALLACE: Same objection, and he may  
20 answer.

21 A. And that's a reasonable hypothesis.

22 Q. So let's now -- well first of all, I think  
23 we're done talking about Mr. Cooper's reports at this  
24 point, so we can move those to the side if that'll make  
25 things a little easier for you before we start our next

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 218

1 set of questions. And these ones can go to the side as  
2 well, actually. And do you have Exhibit 10? Are we  
3 still --

4 MR. WALLACE: I've got 10 if he doesn't.

5 MR. SAVITZKY: We'll re-mark it if we have  
6 to.

7 MR. WALLACE: Is Cooper No. 10?

8 MR. SAVITZKY: Yes.

9 MR. WALLACE: Yeah, I've got it. You don't  
10 have it over there, is your problem; right? She doesn't  
11 have it.

12 MR. SAVITZKY: Yeah, we'll --  
13 it's floating around here somewhere.

14 MR. WALLACE: We'll check it later.

15 BY MR. SAVITZKY:

16 Q. So with that, I want to talk about the voter  
17 turnout piece of this in your analysis of voter turnout  
18 in Mississippi starting with the current population  
19 survey.

20 A. And is that from the initial report or from  
21 another report? Are you talking about the report that  
22 we've been talking about here that you've given me, this  
23 one? That's what we're talking about?

24 Q. I'm actually going to -- I'm talking about your  
25 surrebuttal -- we'll eventually talk about your

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 219

1 surrebuttal.

2 A. Okay.

3 MR. SAVITZKY: In fact, this is a great time  
4 to mark your surrebuttal report. Hold on. All right.  
5 So I'm now going to mark as Exhibit 20, I believe.

6 MS. JONES: Yes.

7 MR. SAVITZKY: Your -- oh, this isn't your  
8 surrebuttal report. I'm sorry. Bear with me.

9 (Pause in the proceedings.)

10 MR. SAVITZKY: Well --

11 MR. WALLACE: Tell you what, I have to go  
12 check out of the hotel. You can keep digging while I'm  
13 checking out of the hotel. I'll be back in, you know,  
14 ten minutes, and maybe you will have found it by then.

15 MR. SAVITZKY: Thanks. Let's go off the  
16 record.

17 (A break was taken from 2:31 to 2:55 p.m.)

18 MR. SAVITZKY: Back on the record. So we  
19 were marking Exhibit 20 which is your surrebuttal  
20 report. That's marked for you here. Mr. Wallace, a  
21 copy. And I have that here. Okay.

22 BY MR. SAVITZKY:

23 Q. Now, before we sort of get into numbers and dig  
24 into the details, let's start with the CPS. What is the  
25 CPS?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 220

1           A. The Current Population Survey?

2           Q. Yeah.

3           A. It's a regular survey that's done by the census  
4         bureau. It's large scale survey, it has supplements in  
5         it, so one of the supplements is a demographic  
6         supplement.

7           Q. Is it done by the census bureau?

8           A. It's -- it's probably done for other agencies,  
9         but the census bureau is the one that does a lot of  
10       survey research, so the CPS is technically done, I  
11       think, by the census bureau.

12          Q. And the CPS includes a voting and registration  
13       supplement?

14          A. That's one of the supplements.

15          Q. And that includes questions about whether the  
16       respondent's registered and voted?

17          A. Yes.

18          Q. And no one goes back and asks the  
19       respondents -- or sorry, strike that.

20           No one goes back and checks whether the  
21       respondents actually are registered to vote.

22          A. As far as I know, they don't.

23          Q. No one goes back and checks if the respondents  
24       actually voted?

25          A. Just like everything else that's in there, they

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 221

1 don't go back and check are you really this age? Are  
2 you really this ethnicity? Yeah, so as far as I know,  
3 it's -- they pretty much take the respondents' words as  
4 given.

5 Q. It's purely a survey, there's no sort of  
6 external validation process?

7 A. You mean in the sense of the answers --

8 Q. Correct.

9 A. -- they've given?

10 Q. The veracity of the answers are not externally  
11 validated?

12 A. That's what I understand the case to be,  
13 correct.

14 Q. And then looking at your January report still  
15 and a page 70, you have a table, Table IV.A.2 where you  
16 looked at Mississippi voting by race and ethnicity using  
17 CPS data; is that right?

18 A. Yes.

19 Q. And based on the data, you conclude that black  
20 turnout in Mississippi in 2020 was 72.9 percent and  
21 white turnout was 69.8 percent?

22 A. Correct.

23 Q. And this CPS data is the primary basis for your  
24 conclusion that blacks vote at higher rates than whites  
25 in Mississippi as a whole?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 222

1           A. It is.

2           Q. And looking at this table, you conclude overall  
3 that the -- that 70 percent of Mississippians voted,  
4 70.3 percent, I suppose, of Mississippians voted in the  
5 2023 election?

6           A. Yes.

7           Q. And you agree, as you set out in your table in  
8 that total voted column, that 70.3 percent turnout would  
9 mean that 1.531 million people voted in Mississippi in  
10 2020?

11          A. Yes.

12          Q. And just looking at Dr. Burch's rebuttal report  
13 which was previously marked as Exhibit 18, and turning  
14 to page 2 of that report --

15          A. So we're on 18 again --

16          Q. Yeah.

17          A. -- or 20.

18          Q. 18. Right here. You have it right here.

19                 And looking just at page 2, second full  
20 paragraph Dr. Burch says: "The official vote count  
21 certified by the Mississippi Secretary of State show  
22 that only 1,313,759 votes were cast or present, highest  
23 participation rate in Mississippi in the November 2020  
24 election." Do you dispute that?

25          A. No.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 223

1           Q. So the CPS overstates the level of turnout in  
2 Mississippi by about 200,000 people, 1.531 million  
3 versus 1.313 million?

4           A. Given the years where this is done and the fact  
5 it's Mississippi, that appears to be the case.

6           Q. I'm sorry, I just want to make sure, is that  
7 answer qualified somehow?

8           A. Well it's qualified with the data that are used  
9 to do it. In that sense, are the CPS data exactly for  
10 the same year that the turnout data are for and things  
11 like that.

12          Q. Right. And so --

13          A. That's all the qualifications I'm making.

14          Q. So with respect to the 2020 election --

15          A. Yes.

16          Q. -- and comparing that number from the official  
17 vote count by the Mississippi Secretary of State, and  
18 the CPS estimate you derived from the 2020 general  
19 election turnout, the CPS overstates the level of  
20 turnout by about 200,000?

21          A. Yes.

22          Q. And you agree, and you stated this at paragraph  
23 149 of your report, page 83, that there is a "likelihood  
24 of overreporting on the CPS voting and registration  
25 supplement."

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 224

1                   MR. WALLACE: I'm not sure I -- apparently,  
2 he didn't hear a question, and I don't think I did  
3 either.

4                   Q. You agree that there's a likelihood of  
5 overreporting on the CPS voting and registration  
6 supplement?

7                   A. I do.

8                   Q. And that -- meaning that when the respondents  
9 get the survey questions to the CPS, when they  
10 overreport, we mean they tend to say they registered or  
11 they voted even when they aren't registered or didn't  
12 vote?

13                  A. That's how I'd interpret overreporting.

14                  Q. And looking at paragraph 148 of your report on  
15 page 83, you would agree that this issue of  
16 overreporting of political participation is present with  
17 any survey data related to voting?

18                  MR. WALLACE: This is in his original  
19 report?

20                  MR. SAVITZKY: Correct.

21                  MR. WALLACE: Here it is.

22                  A. It could be. I don't know enough about every  
23 survey that's ever done to say whether or not they do  
24 it, so of the ones I'm familiar with like the CPS, it's  
25 looks like they overreport.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 225

1           Q. Right. And you say this caveat -- this is the  
2 last sentence -- last sentence of this paragraph: "This  
3 caveat would not only apply to the SSRC survey data but  
4 also the CPS, the APS, any other survey in the United  
5 States that includes questions on voter registration" --

6           A. And I stress it's a caveat. But again, we  
7 don't know exactly what's going on, but I'd be careful  
8 if I was looking at voter registration survey  
9 information and voting information.

10          Q. And you wouldn't dispute that the CPS itself  
11 says that respondent misreporting is a source of error  
12 in the CPS estimates?

13          A. Absolutely I would not dispute that.

14          Q. And looking at paragraph 148 that we've been  
15 looking at of your January report, you say with some  
16 citations to the literature that: "While both blacks  
17 and whites tend to overreport voter registration, blacks  
18 may do so at higher rates -- at a higher rate than white  
19 as is also the case with voting."

20          A. Correct.

21          Q. And in the bibliography of your report, you  
22 cite some literature going into detail on this, a 2021  
23 piece called: Vote Overreporting While Black:  
24 Identifying the Mechanism Behind Black Survey  
25 Respondents Vote Overreporting. And let's just grab

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 226

1 that and mark it as Exhibit 21. Copy, copy. This is  
2 the piece that was in your bibliography mark it as  
3 Exhibit 21.

4 You reviewed this article in putting your  
5 report together?

6 A. I did.

7 Q. And looking at page 3, I think right at the  
8 top -- just let me know when you're there.

9 A. That's the paragraph that starts:

10 "Overreporting among African Americans"?

11 Q. Correct. And the next sentence is: "Perhaps  
12 one of the most consistently documented aspect of  
13 overreporting is that African Americans overreport at  
14 higher rates than whites."

15 A. That's correct.

16 Q. Do you agree with that assessment?

17 A. Yes. Based on the evidence I've seen.

18 Q. And in her rebuttal report, Dr. Burch also  
19 pointed to another 2022 article by Ansolabehere and  
20 Fraga and Shaffner in American -- I think it's in  
21 American Politics Research specifically about  
22 overreporting on the CPS. Do you recall that?

23 A. No. I have to look at it, but it sounds  
24 familiar, so --

25 MR. WALLACE: It's in here, 18.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 227

1                   THE WITNESS: Thank you. And where is it?

2                   What page was it?

3                   MR. SAVITZKY: Well I was going to mark the  
4 actual article, but I can -- I can refer you to the --  
5 so it's cited on page 3, Footnote 6 of her report. She  
6 says: "New research shows not only does the CPS  
7 overestimate turnover for all groups, it does so  
8 differentially by race such that it consistently  
9 overestimates black turnout even more than white  
10 turnout."

11                  A. Yes.

12                  Q. And she cites in an article that I'm now going  
13 to mark as Exhibit 22 entitled The Current Population  
14 Survey Voting and Registration Supplement Overstates  
15 Minority Turnout.

16                  MR. WALLACE: Where is this cited?

17                  MR. SAVITZKY: This is cited in Footnote 6  
18 of Dr. Burch's rebuttal report.

19 BY MR. SAVITZKY:

20                  Q. Do you agree that this is a paper by a  
21 reputable political scientist in an academic journal for  
22 the discipline?

23                  A. Well I don't know them personally, so if you  
24 want me to attest to their reputations, I'm assuming  
25 they're reputable, but yes, I agree that this is a --

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 228

1 this is an article by academics that's published in an  
2 academic peer-reviewed journal.

3 Q. I'm just looking at the summary text on page 1  
4 there, it says: "We compare CPS estimates to official  
5 voter turnout records from 2008 to 2018, document  
6 consistent significant discrepancies that call into  
7 question the reliability of CPS turnout statistics." Do  
8 you see that?

9 A. I do.

10 Q. And it states: "Specifically, the CPS  
11 overestimates black and Hispanic turnout relative to non  
12 Hispanic whites whether relying on turnout rates as a  
13 shared, eligible citizens or the racial ethnic  
14 composition of the voting population." Do I have that  
15 right?

16 A. You do.

17 Q. And they say: "Sampling error in commonly used  
18 adjustments to CPS estimates do not account for or  
19 correct the bias."

20 A. All of it, correct.

21 Q. And just looking at their conclusion in the  
22 last page -- or excuse me, on page, I think, 4 -- oh,  
23 no, it's on page 5, excuse me, of the document, yeah,  
24 conclusion, states: "The author suggests that CPS  
25 should conduct a voter validation study akin to those

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 229

1 undertaken by other surveys." Do you see that?

2 A. I do.

3 Q. You agree with that?

4 A. I do.

5 Q. And they say: "In the meantime, we suggest  
6 that analysts uses caution when making inferences about  
7 variation and turnout rates by racial or ethnic groups."  
8 Right?

9 A. They do.

10 Q. Do you agree with their assessment?

11 A. I think for the research at this point in time,  
12 I think their assessment is well taken.

13 Q. So given the fact that the top line CPS  
14 estimate of voting in Mississippi shows overreporting by  
15 about 200,000 -- I think it's 12 percent overage -- it  
16 would be a reasonable hypothesis that this overreporting  
17 would in particular overstate black turnout?

18 A. That would be a reasonable hypothesis.

19 Q. So let's go back to your conclusion. You  
20 conclude based on the CPS that blacks vote at higher  
21 rates than whites in Mississippi as a whole?

22 A. That's correct.

23 Q. As we discussed, setting aside the issue of  
24 overreporting, just assuming the CPS is reliable for the  
25 moment, your analysis of the CPS data for 2020 shows a

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 230

1       3 point difference between black and white turnout  
2       rates, 72.9 versus 69.8; right?

3           A. Correct.

4           Q. So even a modest racial differential in  
5       overreporting on the CPS would mean that black turnout  
6       would, in fact, be lower than white turnout?

7           MR. WALLACE: Object to vagueness of  
8       "modest," but you may answer.

9           A. It could be.

10          Q. Particularly given of the fact that you have  
11       overreporting at the level of 200,000 voters?

12          A. It could be.

13          Q. And you didn't run any type of t-test on those  
14       two numbers 72.9, 69.8 to determine whether there's a  
15       significant difference between them, did you?

16          A. That's correct. I did not.

17          Q. And actually looking at that table we looked at  
18       before on page 70 of your report?

19          A. This is my original report?

20          Q. Yeah, your January report. Thank you. Table  
21       IV.A.2?

22          A. Yes.

23          Q. You report a margin of error for some of these  
24       numbers --

25          A. Yes.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 231

1           Q. -- 4.1 for white non Hispanic turnout and 4.8  
2 for black turnout; right?

3           A. That's correct.

4           Q. And what does the margin of error mean in this  
5 context?

6           A. The margin of error means that the percentage  
7 points can go up and down over the mean, the percentage  
8 which is the type of mean on that. So as I recall,  
9 the -- unlike the ACS, I think the CPS does 95 percent  
10 confidence intervals, I believe. I could be wrong,  
11 but -- so what this is stating, then, is saying that  
12 we're 95 percent certain that the true amount is within  
13 plus or minus 4.8 percent of 72.9.

14          Q. So fair to say that, again, just setting aside  
15 the overreporting issue for the moment, assuming, you  
16 know, the veracity of the responses, the real number for  
17 self reported black turnout in Mississippi on the CPS  
18 could be as low as 68.1 percent?

19          A. It could be if you're looking at the -- if you  
20 want to look at a 95 percent confidence interval. So if  
21 you look at it that way, there's a range of numbers and  
22 we say we're 95 percent certain that it -- it's a range  
23 estimate rather than a point estimate.

24          Q. And what the CPS is telling us is that the  
25 confidence interval is between 68.1 percent and 77.7?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 232

1           A. Give or take, yeah, that's what it's telling  
2 us. And I believe it is a 95 percent confidence  
3 interval.

4           Q. And then looking at the white turnout number of  
5 69.8 percent, margin of error there is 4.1; meaning  
6 that, again, setting aside overreporting, assuming the  
7 veracity of the responses, the real white turnout number  
8 could be as high as 73.9 percent, and that would be  
9 within the confidence interval for the survey?

10          A. Yes.

11          Q. So 68.1, the lower bound of the confidence  
12 interval for black turnout is lower than 69.8, the mean  
13 white turnout number?

14          A. Yes.

15          Q. And 73.9, the high bound of that confidence  
16 interval for white turnout is higher than 72.9, the mean  
17 level of estimation of black turnout?

18          A. Absolutely.

19          Q. So these confidence intervals for black turnout  
20 and white turnout in the CPS substantially overlap?

21          A. Yes, they overlap. The upper end of one  
22 extends across the mean of the other one and vice versa.  
23 In that sense, they overlap.

24          Q. I mean, they don't overlap by just a little  
25 bit, the mean of one is within the confidence interval

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 233

1 of the other?

2 A. That's what I just said, I thought.

3 Q. But not just over -- in other words, they don't  
4 just -- it's not simply that the upper bound of one and  
5 the lower bound of other cross a little bit, the mean  
6 are within the confidence interval?

7 A. That's the important part. It's not the  
8 confidence interval themselves that overlap, it's do  
9 they cross over the mean of the other independent  
10 sample.

11 Q. And when the confidence intervals of the two  
12 means overlap, that can indicate that the difference  
13 between the two numbers is not statistically  
14 significant?

15 A. It's indistinguishable, that's correct.

16 Q. And would you say that these numbers are not  
17 statistically --

18 A. From a statistical standpoint, that's correct.

19 Q. So -- but your conclusion wasn't that black  
20 voters and white voters vote at statistically similar  
21 rates based on the CVS?

22 A. That's correct.

23 Q. Your conclusion was that blacks vote at higher  
24 rates?

25 A. Yes.

Page 234

1           Q. But the CPS only supports the conclusion that  
2 blacks and whites vote at statistically similar rates?

3           A. Yeah. If you take that into account, and in  
4 this case I took the point estimates at face value  
5 because it's a relatively large sample, even though the  
6 confidence intervals, one end overlap the mean. But  
7 that's correct, you're absolutely correct.

8           Q. So let's talk about the CES. You would agree  
9 that Dr. Burch in her rebuttal report analyzes turnout  
10 using alternate data sources other than CPS, they're not  
11 purely survey based?

12          A. Yes.

13          Q. And one of those is the CES, the Cooperative  
14 Election Survey?

15          A. Correct.

16          Q. Actually, it's -- excuse me. It's Cooperative  
17 Election Study?

18          A. Study, I think that's correct.

19          Q. As you say in paragraph 11 of your surrebuttal  
20 report which has been marked as Exhibit 20, you agree  
21 the CES "has been available and has been used by experts  
22 in the field for many years."

23          A. That's paragraph 11?

24          Q. Correct.

25          A. Yeah, I'm pretty sure I said that in paragraph

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 235

1 11. Yes, I did.

2 Q. And you agree with that still?

3 A. Yes.

4 Q. And you would agree that one aspect of the CES  
5 is that political participation by voters who respond to  
6 the CES is independently validated?

7 A. Yes.

8 Q. So I want to discuss how the CES works to make  
9 sure we're on the same page. And let's mark at this  
10 point the technical documentation that you refer to in  
11 your surrebuttal report, and we'll need one more sticky,  
12 if you don't mind. Are we at 23?

13 MS. JONES: Yes.

14 MR. SAVITZKY: I'm marking as Exhibit 23  
15 Guide to the 2020 Cooperative Election Study. And this  
16 is the guide that you were looking at and referencing in  
17 your surrebuttal report?

18 A. It is.

19 Q. Now you agree that with the CES, the first step  
20 is that there's a preelection survey of adults that  
21 includes demographic questions; right?

22 A. Yes.

23 Q. And in Mississippi, 462 adults responded to  
24 that survey?

25 A. Yes.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 236

1           Q. And in a 95 percent confidence level with a  
2 5 percent margin of error, a sample size of 384 is going  
3 to be representative of population of -- the population  
4 of Mississippi?

5           A. In general I would say that, but you've got  
6 another -- it's another set of qualifications that goes  
7 with it just like they would go with the CPS and  
8 particularly the CES. And that's involves the  
9 weighting.

10          Q. So setting aside weighting and talking only  
11 about whether or not the sample size is sufficient to be  
12 representative, a sample size of over 384 will be  
13 sufficiently large to be representative?

14          A. It depends on the purpose when you say that.  
15 So I'll go slightly into lecture mode here, if that's  
16 okay. So it depends on what's going to be important in  
17 terms of confidence intervals and how willing you are to  
18 live with error. So a sample size of 25, because it's  
19 under what's called large sample theory might be  
20 sufficient to answer questions for something and, you  
21 know, they can deal with the confidence interval as they  
22 come. When you generally get up to a sample size of  
23 around 400, the rule of thumb is that with that, you can  
24 say you're 95 percent certain you're within plus or  
25 minus 5 percentage points of what the true number is

Page 237

1       excluding all sources of other issues. But in general,  
2       that's the case.

3                   So when you say it's representative, a  
4       sample, any sample, as long as it's taken scientifically  
5       is designed to be representative of the population it's  
6       taken from. That, I think, you clearly understand. So  
7       the sample size simply makes your ability to refine  
8       where the point estimates are and in general as long as  
9       there's no change in variation, standard deviations, you  
10      can then start to reduce the confidence intervals so  
11      you're more certain where the actual true number lies in  
12      the population when you're trying to infer to it.

13                  So in that sense, every scientific sample  
14      should be representative, I mean, that's the whole goal.  
15      And what in particular is important when it's  
16      representative is the variation. What you want is not  
17      so much the mean in the sample to be the same as the  
18      population mean, what you want out of the sample ideally  
19      is that the variation of the sample if not exactly the  
20      same, is very similar to what you get in the variation  
21      of the population.

22                  Q. And that's why you use weighting; once you have  
23      a sufficient sample size, you also need to do weighting  
24      to make sure that the sample accurately reflects all the  
25      different attributes of the population?

Page 238

1           A. Yeah, I would not probably not describe it as  
2 exactly that, but what you're trying to do is say, look,  
3 we know we don't have enough people in this particular  
4 category, you know, race, socioeconomic, age, whatever  
5 it might be category, and so we know -- and they may be  
6 differentially representative in the sample, so we're  
7 going to say here's something that we think is a  
8 population that would fit to it. So it's post  
9 ratification that's -- again, I'll go into slight  
10 lecturing mode.

11           So you may have a sample survey and  
12 60 percent of -- in a telephone survey, 60 percent of  
13 the respondents say yes to a question. It turns out  
14 that 60 percent of the population's female, 40 percent  
15 is male, and all 60 percent of the -- 60 of the females  
16 would say yes and all males would say no. So you've got  
17 to readjust it -- do you follow me -- so that you've got  
18 the right estimate of what you think the population  
19 estimates are, because when you do that, then it looks  
20 like it's going to be 50:50. And that's what weighting  
21 attempts to do.

22           Q. And we'll talk a little bit more about  
23 weighting, but I want to -- in terms of sample size --  
24 and I believe it's the Krejcie and Morgan, you know,  
25 formula originally, but we agree that once you get up

Page 239

1 above 400, you should have a sufficient number of  
2 respondents?

3 A. But again, what I stress in that regard is that  
4 what you're doing is, you're -- you can make a statement  
5 such as I'm 95 percent certain that I'm within plus or  
6 minus 5 percentage points of what might be the case. If  
7 you get up to 800, you can say I'm 99 percent certain.  
8 So what it does is, it reduces the uncertainty around  
9 the point estimate that you've gotten and the range  
10 estimate.

11 Q. And I think we're totally on the same page, let  
12 me restate the question just for clarity.

13 For purposes of being able to speak to  
14 something with 95 percent confidence and with a  
15 5 percent margin of error, once you get to 400 or more  
16 respondents on a survey, you will have a sufficient  
17 number of respondents to speak to the question at that  
18 level of confidence?

19 A. Given that the survey was done on a scientific,  
20 you know, random selection basis, given that you don't  
21 have a whole lot of bias in the survey, given that  
22 people -- there's not a lot of differential nonreporting  
23 at the personal level, etcetera, etcetera, etcetera, all  
24 else being equal, yes.

25 Q. Okay. And just looking briefly at Dr. Burch's

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 240

1 surrebuttal report which I think is -- oh, her rebuttal  
2 report, excuse me, which is Exhibit 18, and looking at  
3 page 4, Footnote 12 --

4 MR. WALLACE: Page 4, Footnote 12.

5 MR. SAVITZKY: Yep.

6 BY MR. SAVITZKY:

7 Q. Let me know when your there.

8 A. I'm there.

9 Q. You would agree that 462 respondents sample for  
10 Mississippi is above the minimum sample size to detect  
11 small effects, co D equals .2 with a standard level of  
12 statistical power pointing -- in a significance level of  
13 .05?

14 A. I agree, as I just said, when it's above that  
15 number, then you've got a 95 percent chance of your  
16 confidence -- your confidence intervals as stated, I'm  
17 95 percent certain that the estimate that we're getting  
18 is plus or minus 5 percent of what the true number of  
19 the population is.

20 Q. And you wouldn't dispute Dr. Burch's  
21 characterization that this number, that 462 is above the  
22 minimum sample size to attack small effect at that level  
23 of statistical power and significance?

24 A. Yeah, I would dispute that because there may be  
25 small effects that that sample is not going to pick up

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 241

1 that large. Do you follow me? There could be really  
2 minimal differences that are important in a certain  
3 situation where a sample size of 400 is not large enough  
4 to detect that it's a statistically significant  
5 difference. So in that sense, it depends on the  
6 context. And if you're asking about the context in  
7 which we're talking about voting survey, then it  
8 probably is adequate. I think that's a question you  
9 wanted to ask me.

10 Q. Yes. And specifically in the context of  
11 analyzing voting by race in Mississippi?

12 A. Yes. And I would qualify my answer again,  
13 everything else being equal, it should be.

14 Q. So getting back to how the CES is done, we  
15 talked about the first round of questions. Then there's  
16 a second postelection wave of questions that are asked  
17 of the same respondents in a postelection second set of  
18 questions; right?

19 A. Yes.

20 Q. And the postelection wave, post wave of  
21 questions includes questions about whether or not the  
22 person voted?

23 A. Yes.

24 Q. Not every voter responds to the second wave?

25 A. That's correct.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 242

1 Q. Most of them do.

2 A. (Nods head.)

3 Q. And then in addition to the data from these two  
4 waves of survey questions, there's also vote validation  
5 information that is added to the dataset --

6 A. Correct.

7 Q. -- for all the respondents; right?

8 A. I believe that's correct, for all the  
9 respondents.

10 Q. And the validation is done using state voter  
11 history databases to check whether voters are registered  
12 and whether according to their vote history they  
13 actually voted?

14 A. Yes.

15 Q. And we can look at the CES documentation which  
16 was marked as Exhibit 23?

17 A. Yes, it's over here. I've got it.

18 Q. Looking at page 19 at the vote validation  
19 variables, we can see -- so one of the variables is CL  
20 voter status which reflects whether the voter is  
21 registered; and if that's missing, then there was no  
22 match on their registration record. Does that sound  
23 right?

24 A. I think so.

25 Q. And then if you have CL 2020 GVM which is

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 243

1 whether the respondent voted in the 2020 general  
2 election; right?

3 A. And how they voted.

4 Q. And their method of voting?

5 A. Yes.

6 Q. And if there's no data for that variable, then  
7 they were not validated as having voted?

8 A. It's unknown, I believe, is what they put in  
9 there.

10 Q. They say: "If missing, respondent did not have  
11 a report of voting."

12 A. Yes.

13 Q. Okay. And you would agree with the statement  
14 on page -- the next page, page 20 of the documentation,  
15 if a person has any nonmissing value for CL 2020 and  
16 GVM, they have a validated vote record for that  
17 election?

18 A. Correct.

19 Q. And you would agree that this validation  
20 procedure was performed for every survey respondent  
21 whether or not they responded to the second wave  
22 questions?

23 A. That's what the study states.

24 Q. You would agree that the validation was  
25 performed whether or not they say they voted?

Page 244

1           A. That's what they state, so I have no reason to  
2 disagree with what they state they did.

3           Q. And so you'd expect in the data, there are some  
4 respondents who did not answer the second wave of the  
5 survey but can be and were validated as being registered  
6 and having voted in the 2020 election?

7           A. Yes, that could happen.

8                   MR. SAVITZKY: And just for completeness,  
9 why don't we now mark two more exhibits. I didn't end  
10 up marking Krejcie and Morgan, but I could. So what I'm  
11 going to mark here, first with Exhibit 24, I'm going to  
12 mark -- so I'm going to mark Exhibit 24, and you can  
13 just look at that. That is the raw data, not every  
14 variable, the selection variables, otherwise, the raw  
15 data for the Mississippi CES.

16 BY MR. SAVITZKY:

17           Q. Can you just check that, see if you have any  
18 reason to dispute that, and you can also confirm that it  
19 has 462 rows.

20           A. I confirm that.

21           Q. Okay. And I'm also marking as Exhibit 25 same  
22 exact data but this one just for ease of use, we have  
23 re-coded the raw data with the equivalent textual  
24 information so it's legible to work with.

25           A. Okay.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 245

1           Q. Okay. And we can see in these columns there's  
2 a variable that says: "Took post," do you see that?

3           A. Yes.

4           Q. Which means that they took the post wave  
5 survey?

6           A. Yes.

7           Q. And then for those who didn't -- who have a no  
8 for took post, they also have an N/A for their weight in  
9 the common post weight weighting; right?

10          A. I see that.

11          Q. And we can see the CL voter status and CL 2020  
12 GVM information is there as well?

13          A. I do.

14          Q. Okay. And take my copy out too.

15                 And just to confirm what we were talking  
16 about earlier, looking at row 60, which is on the second  
17 page --

18          A. Of Exhibit 25, right.

19          Q. -- of Exhibit 25, we can see this row 60 is a  
20 respondent who did not take the postelection survey;  
21 right?

22          A. Yes.

23          Q. And they're not weighted in the post weight  
24 weighting metrics; right?

25          A. That's correct.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 246

1           Q. But if we look at whether they're registered  
2 and whether they voted, they're active and they had a  
3 validated vote; right?

4           A. Yes.

5           Q. And if we look at row 108 on the next page,  
6 another example, took post N/A, not weighted, if we look  
7 at common post weight and VV weight?

8           MR. WALLACE: What number are we on now?

9           THE WITNESS: 108.

10          MR. WALLACE: 108. Okay.

11          Q. Right, took post N/A, no weighting in common  
12 post weight and VV weight; right?

13          A. Correct.

14          Q. But active with a registration record, and  
15 their vote was validated?

16          A. Correct.

17          Q. I could actually go through a bunch of these,  
18 but if I represented to you there are 29 such records  
19 overall of voters who didn't take the post wave survey  
20 but whose votes were validated, would you dispute that?

21          A. I believe you.

22          Q. All right. So we may -- we my use these again,  
23 we'll just set them aside for now.

24           So the last part of the CES I want to make  
25 sure we're square on is the weighting system, and we

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 247

1 started talking about this a little already. Generally  
2 speaking, you would agree that weighting is used to make  
3 statistics computed from the data more representative of  
4 the population.

5 A. That's the idea, yes.

6 Q. And you would agree that using weights is more  
7 or less ubiquitous in survey-based research?

8 A. It is.

9 Q. ACS is weighted? CPS is weighted.

10 A. (Nods head.)

11 Q. You would agree that if the sample is not self  
12 weighted, it's a good idea to use weights as often as  
13 possible?

14 A. I don't know if I can say that about any case,  
15 but if you want to -- if you know the -- or have reason  
16 to believe the sample is not representative of the  
17 population in the sense you're talking about and that it  
18 is a scientifically drawn random, even if it's a complex  
19 random sample, then in general the idea would be you'd  
20 want to use weights but you want to make sure the  
21 weights represented the population in question too.

22 Q. And as you explain in your report: "The basic  
23 idea of weighting in a survey is, you're assigning  
24 weights to each of the responses in order to have the  
25 attributes of the sample population more actively mirror

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 248

1 the attributes of the overall population."

2 A. Correct.

3 Q. And for the CES -- and we can look at page 16  
4 of that technical documentation that I believe was  
5 marked as Exhibit 23 -- you would agree the CES samples  
6 were weighted to match the distributions of the 2019 ACS  
7 on gender, age, race, Hispanic origin, and education  
8 level?

9 A. And where's this?

10 Q. This is on page 16.

11 A. Thank you.

12 MR. WALLACE: 16? Okay. I thought you said  
13 19.

14 MR. SAVITZKY: 16.

15 BY MR. SAVITZKY:

16 Q. Last sentence of the first paragraph: "The CES  
17 sample was weighted to match the distributions in the  
18 2019 ACS on gender, age, race, Hispanic origin, and  
19 education level."

20 A. Yes.

21 Q. All right. And that is the set of weights that  
22 are used for the common weight and common post weight --

23 A. Yes.

24 Q. -- systems. And then there's another set of  
25 weights that was created, the VV weight and VV weight

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 249

1 post that's only for respondents for whom there was a  
2 validated voter registration number; right?

3 A. Yes.

4 Q. And those were matched to the demographic  
5 attributes of registered voters according to the 2020  
6 CPS?

7 A. Yes.

8 Q. Now staying on page 16 of this technical  
9 documentation that we're looking at and looking down the  
10 page, we can see the four weighting variables that we  
11 talked about earlier; right?

12 A. We can.

13 Q. Common weight, common post weight, VV weight,  
14 VV weight post?

15 A. Yes.

16 Q. And the idea is that because we have common and  
17 VV weights that represent the whole population of adults  
18 versus with the VV weights, only those with a validated  
19 registration record, and then we have post versions that  
20 should be used when talking about the second wave  
21 questions?

22 A. Correct.

23 Q. Because the population that answer the second  
24 wave is slightly different, so you need to use different  
25 weights to true them up to either the ACS in the face of

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 250

1 common most weight or the CPS in the case of VV wave  
2 post?

3 A. Correct.

4 Q. And just continuing to refer to this discussion  
5 of weighting in the technical documentation, you would  
6 agree that the common weights are meant to ensure that  
7 the sample is representative of all adults in  
8 Mississippi in this case?

9 A. Yes.

10 Q. And the VV weights are meant to ensure the  
11 samples are representative of all adult registered  
12 voters?

13 A. Yes.

14 Q. And you would agree, as I think they say in the  
15 technical documentation, common weight should be used  
16 when you're characterizing the behavior of all adults?

17 A. Yes.

18 Q. And you would agree that common post weight  
19 should be used when characterizing the behavior of all  
20 adults but referring to variables from the second  
21 postelection wave of questions?

22 A. That would be the ones who actually voted or --  
23 right? They responded to the second wave, that's a  
24 better way to say it, and reported whether they voted or  
25 not.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 251

1           Q. So you should use common post weight when  
2 referring to all adults but looking at responses to the  
3 second wave questions?

4           A. Yes.

5           Q. And you would agree that VV weight should be  
6 used when characterizing the behavior only of registered  
7 voters in Mississippi?

8           A. Yes.

9           Q. And you'd agree that VV weight post should be  
10 used for characterizing the behavior of only registered  
11 adults and also looking through results of those second  
12 wave, post wave questions?

13          A. Yes.

14          Q. And just sticking with the VV weights for a  
15 moment, you would agree that by definition, the VV  
16 weights exclude people who were not independently  
17 validated as being registered to vote?

18          A. I believe that's the case, yes.

19          Q. Meaning that those responses were given a  
20 weight of zero, so when you apply the VV weight  
21 variable, they're not counted?

22          A. I believe that's correct.

23          Q. So if someone reported on the second wave of  
24 questions that they had voted but in fact they weren't  
25 even registered, that would be an instance of

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 252

1 overreporting; right?

2 A. Yes.

3 Q. But that instance of overreporting wouldn't  
4 show up if you used a VV post, it would be excluded from  
5 the sample?

6 A. It could be, yes.

7 Q. Well --

8 A. Yes. Well, if that's the weight you're using,  
9 giving the weight of zero, that's what you're saying.

10 Q. Yes.

11 A. Yes.

12 Q. So if you applied VV weight post, you would  
13 exclude that instance of overreporting?

14 A. Yes.

15 Q. And that's because VV weight post only includes  
16 people who were independently validated as registered?

17 A. Yes.

18 Q. And so if there are racial disparities in who  
19 was validated is registered in the first instance, those  
20 would all be masked when you use VV weight as well?

21 A. They could well be masked, yes, depending on  
22 how many people were not carried forward into survey,  
23 but they could be, yes.

24 Q. Well when you use VV weight or VV wait post,  
25 you're only looking at voters who have a validated

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 253

1 registration?

2 A. I understand that. But the issue is how many  
3 of the initial sample were not followed up in that part  
4 of the survey. Do you follow me? So if it's a pretty  
5 high number, then you would be having some problems; if  
6 it's not so high a number, you may not be.

7 Q. I guess my question is: If there are racial  
8 disparities in who is registered to vote and you use VV  
9 weight such that people who aren't registered to vote  
10 with a validated registration are taken out, you're not  
11 going to pick up those disparities?

12 A. Right. On a visual basis, yes.

13 Q. And another item on the CES generally, in  
14 looking at page 17 of this technical documentation,  
15 there's a sort of discussion under the heading Accuracy  
16 of the CES Sample with some discussion about validating  
17 the sampling done in the CES by comparing survey results  
18 to actual election results. Do you see that?

19 A. I do.

20 Q. And the authors say: "In the large sample, the  
21 CES allows us to validate sampling by comparing the  
22 state level samples within the survey with the actual  
23 election results."

24 A. I do.

25 Q. You dispute that?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 254

1           A. No.

2           Q. And the authors conclude that: "Overall the  
3 results from these analyses demonstrate the CES is a  
4 reliable source of data on voting at both the national  
5 and state level." Do you dispute that?

6           A. That's their conclusion. I don't dispute it.

7           Q. So let's look at your surrebuttal report, which  
8 we marked as Exhibit 20? Is that right?

9           MS. JONES: Yes.

10          Q. And looking at paragraph 11 of your report, you  
11 say: "Generally speaking, when a survey sample is being  
12 used to analyze extremely small populations, the largest  
13 sample possible is most beneficial." Right?

14          A. Correct.

15          Q. Do you contend that Dr. Burch analyzed an  
16 extremely small population in looking at black voter  
17 turnout and white voter turnout in Mississippi?

18          A. When you look at the black voters, they're in  
19 the 462 sample set, it starts to look small, yes.

20          Q. Do you know how many black respondents there  
21 are of that 462?

22          A. I'd have to go back and look.

23          Q. If I represented to you that it's 160  
24 respondents who were black?

25          A. That's sounds correct, yeah.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 255

1 Q. And is that an extremely small sample size?

2 A. Well it depends again on the context of what  
3 you're trying to do and what you need for confidence  
4 intervals and margins of error and all that. So it's  
5 hard, again, in general to say this is an extremely  
6 small sample size or not. So in the context of this, it  
7 may be the fact, and as I looked at it, that it could be  
8 that it's a small sample.

9 Q. Well just to be clear, you don't see it's a  
10 small sample, you say: "When a survey sample is being  
11 used to analyze extremely small populations." Do you  
12 contend that black voters in Mississippi are an  
13 extremely small population?

14 A. No. The statement there is general. But what  
15 goes on with the -- when you're using this, if you start  
16 to get -- for example, if you're looking at Dr. Burch's  
17 analysis, so let's look at somebody who might be, let's  
18 say, black of a certain age, they're eligible to vote,  
19 what their educational attainment is, you're starting to  
20 drop the sample size down. So from the 462, you're  
21 starting to go get down to small numbers.

22 Q. And did Dr. Burch analyze behavior by black  
23 voters in a particular subregion with particular  
24 educational and socioeconomic characteristics?

25 A. Well for the sake of Mississippi, she did.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 256

1 Q. She looked at black voters in Mississippi?

2 A. Yes. And that was the point I'm just making.

3 Given the state as a whole, you can get down to small  
4 sample sizes.

5 Q. And I just want to be clear. You're not saying  
6 that black voters in Mississippi are an extremely small  
7 population?

8 A. No, I'm not.

9 Q. And you say -- and maybe this is getting to  
10 what you were saying before -- "Rare populations that  
11 have unique combinations and characteristics tend to  
12 have high weights that carry the risk of significant and  
13 may disproportionately impact any statistic using those  
14 respondents."

15 A. That's correct. And I'll give you an example  
16 of it right here in the exhibit you gave me labeled  
17 No. 25. Are you ready?

18 Q. Sure.

19 A. So let's look at the weights, and let's take  
20 Case No. 320. I need a ruler to make sure I'm staying  
21 on the same line here.

22 MR. WALLACE: Maybe this'll get you.

23 THE WITNESS: Thank you.

24 A. Let me know when you're ready.

25 Q. I'm ready.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 257

1           A. So Case 320. The common weight is 7.2, the  
2 common post weight is 14.298, the VV weight is 7.8, and  
3 the VV weight post is 6.6. Those are really high  
4 weights, and they're indications to me of exactly what I  
5 was saying about if you've got weights that high, you  
6 get down to subcategories of people that are so small,  
7 you're weighting them up really highly. And that's  
8 what's going on here.

9           Q. And I guess my question is: What are the  
10 subcategories that you contend that Dr. Burch analyzed?

11          A. Well if she analyzed anything with these people  
12 in it, then they have these weights on it. If she  
13 analyzed Case No. 320, and I didn't see anything that  
14 said she excluded it, that has a weight of 7.2.

15          Q. But you agreed previously that we use weights  
16 in order to make the surveys more accurate and to true  
17 it up to the characteristics of the population?

18          A. I understand that. But the -- as we said  
19 earlier too, there's a lot of tradeoffs in this. And so  
20 what you get is, if you've only got one person that fits  
21 in certain categories and you have to weight that person  
22 by a factor of 7 just on the common weight, it means  
23 you're putting a lot of burden on that person. What  
24 you've got is an inverted pyramid. So you've got one  
25 person representing a whole set of people. And that's

Page 258

1 what I mean. Whatever the categories were that they  
2 took in detail that they decided they only needed to --  
3 that they need to put a weight that big on the common  
4 weight is really representative of the fact that there's  
5 a lot of -- and this goes on and on throughout this  
6 entire survey. You can see it. I mean, carry this one  
7 over, you get into the common post weights for this  
8 person, it's 14. This person's representing 14 people.  
9 And when you look at the diagnostics on Dr. Burch's  
10 logistic regressions, you can start to see that the  
11 diagnostics and the differences in the DF betas, they're  
12 all indicating that you've got outliers scattered  
13 throughout this dataset that if you took one of them  
14 out, your results change. And that's what that says,  
15 and that's what the meaning of my statement is.

16 Q. And we'll just get into this, but just to be  
17 clear, when you talk about the diagnostics, those are  
18 diagnostics that you ran using the VV weight?

19 A. Or any other weights. But you can see them on  
20 here, I just ran the VV weights. But using any other  
21 weights, it's going to be very similar. I can tell from  
22 experience and looking at weights and running  
23 regression, all those diagnostic things are not  
24 exclusively logistic regression, they're used throughout  
25 all kinds of regression analyses, and I've used them.

Page 259

1 You start seeing the matrix Ds, the Cook distances, the  
2 DFFITS, the DFBETAs -- I'm sorry for all the acronyms --  
3 you start looking at those things, and you start to see  
4 how many of them are fairly large and you go, my  
5 goodness, you take -- so here's the simple example.  
6 Picture a diagonal -- you know, a 45-degree angle line  
7 like this, all right? So you have a regression line,  
8 all the data points on it, the R-squared on that's going  
9 to be 1, you know, the X variable perfectly predicts the  
10 Y variable. You could have an outlier up here in one,  
11 okay. And so the regression line, the R-squared is not  
12 going to be 1, it's going to be something else. You  
13 took that one point out of there, and all of a sudden  
14 it's 1. That's what these are indicating to you.

15 So there's a lot of -- because the case  
16 sizes and whatever the categories are that the CES uses  
17 are so small, however they did it, age, education,  
18 whatever they all are that they weighted up to, whether  
19 it's ACS or the CPS, you're looking at these weights  
20 like this, my goodness, this -- you're putting a lot of  
21 burden -- as I said, it's like an inverse triangle on  
22 different people, such that if you took a few of these  
23 cases out, you might get a totally different answer.  
24 That is major problem I see with using the CES. Whether  
25 it's exclusively to Mississippi, I don't know. So all

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 260

1 the arguments about the sample size being sufficient,  
2 462, yes, in general you get what I said, 95 percent  
3 confidence plus or minus 5 percent. But you start  
4 getting down to these weights -- and it crosses them.  
5 Doesn't matter if you use common weights, common post  
6 weights, the VV weight, the VV weight post, you're  
7 starting to look at things and go, my goodness, what  
8 this starts to indicate to me, not only do you get  
9 differences in how the FITS are, but how the parameters  
10 are. The models can change dramatically, dramatically.  
11 Sorry for the lecture mode. That's one of the big  
12 issues I see with it.

13 Q. So -- and by the way, you referenced the CPS  
14 and ACS. Those are also weighted?

15 A. Yeah, they're weighted themselves.

16 Q. And --

17 A. And then you're weighting to, you know -- so  
18 it's becomes complex. And however all the process was  
19 done to get to the point -- and I think the people who  
20 put this study together did the best job they could and  
21 I don't have any reason -- they weren't trying to bias  
22 anything, they're trying to make a good survey that  
23 people can use. But the point is, you get to things --  
24 if all the weights were something like .094 and 2 and 1,  
25 things like that across the board on all these, that

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 261

1 might be something different.

2           But my goodness, when you start to see  
3 weights like I just noted 7, there's another one. So  
4 No. -- I think it's No. 35, 7.39 common weight, 10 on  
5 the common post weight, then it's 8 on the VV weight,  
6 and it drops way down to 1 on this. I mean, you get all  
7 kind of variations in this. And that really affects the  
8 models and what you can do with it.

9           Q. So I understand your opinion that the weights  
10 are high.

11          A. Well, it's not -- the weights are high. It's  
12 not my opinion. When you run the diagnostics on the  
13 logistic regression analysis, you can see it in the  
14 diagnostic information. As I said, what are called the  
15 DFBETAs, the differential change in the coefficients in  
16 the model, the DFFITS, DFFITS is what it's called, the  
17 differential changes in the FITS. In the Cook's  
18 distance, how far are you moving away from something.  
19 And they all apply, which indicates you've got a lot of  
20 instability in the model.

21          Q. So this is -- you're anticipating my next  
22 question. I had one other to ask, I'll go back and ask  
23 you, but you run a Cook's distance test?

24          A. They're all -- all that stuff is in the output  
25 that I put on the appendix in my report. It's all

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 262

1 there. I put up -- Dr. Burch did not put any of those  
2 diagnostics in her report. All those diagnostics are in  
3 my report.

4 Q. And you ran tests to measure the influence of  
5 particular respondents on the survey?

6 A. They show it. That's what these lines are back  
7 here.

8 MR. WALLACE: What page you're looking?

9 A. Well, pick one. Pick page 85. You know, I --  
10 let me pick something that's -- let's go to page 77.  
11 Are you ready?

12 Q. Uh-huh.

13 A. Page 77, top part, look at Case No. 460. So  
14 remember, Burch dropped 2 out of her test, right, so she  
15 ended up with 460.

16 Q. Correct. Because those are non citizens.

17 A. Right. So look across here, it says Cook's  
18 distance C and Cook's distance C bar --

19 Q. Uh-huh.

20 A. -- do you see those? Look at the numbers on  
21 these. And these are not the only ones. These start to  
22 indicate to me that with these kinds of distances -- and  
23 C means it's specific to. If you take this out, what  
24 kind of change do you get -- and the Cook's distance,  
25 C bar is an aggregate of it, you're going to start

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 263

1 getting big changes in what the parameters are. And the  
2 parameters would be -- let me go to the front where you  
3 actually get logistic regression models. Bear with me  
4 while I go through page changes here. So where it says  
5 here regression coefficients --

6 MR. WALLACE: Which page?

7 A. Okay. I'm sorry, page 21.

8 MR. WALLACE: OKAY.

9 A. So when you start -- these are the --  
10 basically, this is her model that I replicated. You  
11 know, I'd have to look at this in detail. But what I'm  
12 talking about is in general, those numbers. And that's  
13 what generates the estimates. Is this going to be in  
14 category 1, the validated voter or not a validated  
15 voter? Those numbers can change dramatically.

16 And so I -- she didn't provide any of this  
17 kind of residual analysis in her report -- let me  
18 finish -- and when I ran them, it looked to me like  
19 there's a lot of instability in the dataset itself and  
20 it probably has to do a lot with the weights. You know,  
21 that's just my hypothesis at this point. Such that if  
22 you pull certain people out or if something changed  
23 smally (sic), you can get a big change on what the model  
24 looks like including the parameters, whether or not it's  
25 statistically significant, all sorts of issues like

Page 264

1 that.

2                   And I didn't see anything in the literature  
3 about any of these issues. So when I looked at it  
4 myself having had the experience with exactly doing this  
5 with every form of regression analysis I run, you start  
6 going, my goodness, this -- there's a lot of instability  
7 in the dataset itself.

8                 Q. And just looking at page 21 here, what is it  
9 here that you were relying on for the statement that if  
10 you changed a few of the respondents, you'd get a  
11 different result?

12               A. What I'm saying is, see -- page 21, see where  
13 it says odds ratios? Where it says, independent  
14 variables, see where it says intercept, black and other  
15 race? Those are the variables she used in her model.  
16 Then move over, see where the column that says had  
17 reduction coefficient, see where it says B and then in  
18 parenthesis i, B1, B2, B3. The intercept value is .25,  
19 the black coefficient is minus 0.354, the other rates is  
20 minus 1.24. These are the ones that generate whether --  
21 this is what generates are you going to be placed in the  
22 category of the validated voter or a nonvalidated voter;  
23 right? But if you start getting the .25 because you  
24 pull out of the real influential places on there, that  
25 could change -- I'm just hypothetically making this up

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 265

1 to show you -- that could change to .3 from .25, could  
2 change to .4. The minus 5.4 could change -- the point  
3 I'm trying to make is, you could get number changes from  
4 this that then put something in a different category.

5 That's what I mean by the dataset looks to  
6 me with those kinds of weights -- and when I looked at  
7 the residual analysis, that is diagnostics from all the  
8 standpoints I know how to look at it from given that you  
9 had a multidimensional problem, you've got an issue.

10 Here's another issue. This is called a ROC curve --

11 MR. WALLACE: Which page?

12 A. I'm sorry. Page 37. Receiver operating  
13 characteristics. Do you follow me where it says rock  
14 curves, combined and separate. That diagonal line is if  
15 there's no explanation in something as you're going on.  
16 What the ROC curve shows you is as you start to get up  
17 to certain probabilities of predicting correctly not  
18 having a -- what's the term they use, a type 2 error,  
19 there's another term they use in the medical profession,  
20 but it's a probability -- it's mislabeled. So you're  
21 correctly predicting it's going to be head and it turns  
22 out to be head. But if you're correctly predicting a  
23 head and it turns out to be tails, you've made an error.  
24 Do you follow me?

25 So what you ideally want to see in a ROC

Page 266

1 curve relative to this diagonal line is a line that's  
2 almost vertical going up from zero here as high as it  
3 goes and then goes across like this. What that means  
4 is, hey, I can get up to a real high probability of  
5 being correct with still maintaining a low probability  
6 of it going into the wrong category. And what these ROC  
7 curves show to me is that her model is not much  
8 different than the diagonal, it's not doing that. At  
9 every level, she's getting probability of predicting  
10 incorrectly, and she has probabilities of correctly  
11 predicting. That to me is not --

12 Q. Well it's not equal, it's the same. I think in  
13 your report you say --

14 A. If it would be equal, the same, but it is  
15 almost the same. You go back to the one point in my  
16 report where I said her classification system only gets  
17 something like 54, 50 percent.

18 Q. You said 57 percent.

19 A. Yeah. That's not very good.

20 Q. With one variable getting a --

21 A. Well, her model --

22 Q. -- heads or tails?

23 A. -- right -- right there, just her model in  
24 general, 57 percent. I could flip a coin and say every  
25 time I'm going to flip it, I'm going to get heads. I'm

Page 267

1 right 50 percent of the time. And if you look at people  
2 who recommend using logistic regression, if you're down  
3 to 50.57 your model does correctly, you look at the ROC  
4 curves and everything else, it's suggests to me that the  
5 model is not very good. And I think it's not that she's  
6 necessarily flawed on trying to run logistic  
7 regression -- I don't know the answer to that -- but I  
8 think it reflects a lot of problems in the stability of  
9 the dataset. Does that help?

10 Q. You don't think that there's any reason why the  
11 weighting that was applied by the CES is not accurate in  
12 terms of trueing up this sample to the ACS or CPS?

13 A. Again, I stress the fact when you get down to  
14 categories of people. What's their age? What's their  
15 race? What's their educational attained? Whatever else  
16 they've collected in that survey, that's what they're  
17 trying to match back to, all those characteristics in  
18 either the CPS or the ACS. And you start getting to  
19 also, okay. You have 462 people. How many are black?  
20 167. How many have an educational attainment of --  
21 okay, now you're down to 90. How many have this, you're  
22 down to 80. How many have that, you're down to 50,  
23 you're down the 40, you're down to 30. You're down to  
24 small numbers. And you go, okay, to get it up correctly  
25 so we have the right distribution of people relative to

Page 268

1 what we see in the ACS or the CPS, we've got to assign a  
2 weight. In some cases, they're pretty low, they're not  
3 much; but in some cases, in quite a few of them, you've  
4 got some tremendous weights when you start looking at  
5 them. One person's representing 7 people? And I think  
6 one of them that I found when I looked through this  
7 earlier had a weight of 14.

8 Q. But again -- I just want to be clear on this --  
9 you're not saying that weighting is inaccurate in terms  
10 of doing what it is supposed to do and conforming the  
11 characteristics of the sample to the characteristics of  
12 the general --

13 A. I'm not saying that. The tradeoff in doing  
14 that is, you get an unstable model when you're --  
15 because of those weights that -- and I think -- I can't  
16 attest to exactly that's the whole problem with it, but  
17 when I looked at the diagnostics that I ran and saw what  
18 I saw, I'm telling you there's a problem with the model.  
19 And my guess is, it reflects the facts that you've got  
20 what I would call influential outliers. And those  
21 influential outliers are the people with really large  
22 weights.

23 Q. Well, I mean you say that there are indications  
24 of instability in the model, but you also agreed that  
25 the CES, I believe we said, is a reliable source of data

Page 269

1 on voting at both the national and state level?

2 A. Did -- when they designed the CES, did they

3 design it necessarily to run with logistic regression?

4 No. What they designed those samples for is, they want

5 to be representative of the population. Researchers are

6 out looking for datasets to use. So when they go out

7 looking for datasets to use, they may not be expressly

8 designed for the datasets we're using. Can I finish?

9 You look like you're yawning because I'm lecturing, or

10 else --

11 Q. No, no, no.

12 A. I couldn't tell.

13 Q. I was opening my mouth. Go ahead.

14 A. Thank you. So the datasets initially are not

15 designed for that, they're designed to say it's

16 descriptive, here's what we think is going in on the

17 United States or this state or some place at this point

18 in time. The researchers have got to pull those

19 datasets out to use them. And so again, I go back to

20 the point you've got tradeoffs. Yes, we made it so it

21 represents a population and if you look at it just as it

22 is, we think it did a pretty good job. We can say we're

23 95 percent certain within plus or minus 5 percentage

24 points. Then you go and start to do for a research

25 question or a model building session, and all of a

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 270

1 sudden you realize, I've got weights in here that are  
2 1 person's equal to 14 or 7. Well, that may or may not  
3 be a problem until I run something I'm trying to do, and  
4 then I'm looking at the diagnostics, as I've shown the  
5 examples of, and the diagnostics I ran indicate to me  
6 they're -- you've got a lot of instability, and I think  
7 it comes -- stems from the weights that are on these  
8 relative to the sample size. And it's because you're  
9 not using a sample that was designed to be -- all the  
10 samples are designed to be somewhat representative of  
11 the populations, but they're not necessarily designed  
12 for people to run models on.

13 Q. You talk about running models. You would agree  
14 that Dr. Burch did not only conduct a logistic  
15 regression analysis but also arithmetically reported the  
16 percentage of validated voters based on race in  
17 Mississippi?

18 A. I agree.

19 Q. And her numbers reporting those arithmetically  
20 are the same as the numbers that she obtained through  
21 the regression analysis?

22 A. They -- when you look at the -- when you look  
23 at, like, the percent voters on the same, look at it  
24 that way, how I would characterize that is, you didn't  
25 have to go through the regression analysis to aggregate

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 271

1 back up. She had the data to start with in the  
2 beginning. She had it. Just run a simple t-test on it.  
3 Do you follow me? You have the ability -- it'd be like  
4 saying, okay, I've got household level data, income  
5 level, all right, and I also have the income levels of  
6 everybody in the household, six people. I'm going to  
7 build a model now that accurately estimates what their  
8 incomes are, and I'm going to add that up to get the  
9 household level data. Why would you go through the  
10 individual people if you already got the top. And she  
11 could have just done a t-test at the beginning, and I  
12 believe had she done so, the results would have said,  
13 yes, it looks like there's a higher percentage of white  
14 voters than there are black voters that actually went  
15 out to vote and all that. But the results are  
16 statistically not significant. You can't tell the  
17 difference on them because the margins of errors or so  
18 wide.

19 Q. And you didn't run that t-test?

20 A. I did.

21 Q. You didn't run t-test on top line numbers --

22 A. Yes, I did.

23 Q. -- that she obtained.

24 A. I didn't put it in my report. If you're asking  
25 me if I ran one, I ran one at one point in time and said

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 272

1 to myself why did she run a regression analysis to get  
2 back up to this point? Why didn't she just do a t-test?

3 Q. And you did run a t-test.

4 A. Yes.

5 Q. You didn't include it in your?

6 A. I didn't.

7 Q. Why not?

8 A. I just didn't think about it at the time, that  
9 it was important.

10 Q. Can you provide it?

11 A. I can, yeah.

12 Q. Okay. And just while we're on the subject, you  
13 talk about those four respondents that you identified  
14 with those high weights?

15 A. Well and there's more, I just picked them out  
16 just glancing through the set.

17 Q. And you say they form a potentially influential  
18 set of cases in this small sub sample Dr. Burch's used  
19 in her analysis?

20 A. In the entire sample for State of Mississippi,  
21 somebody with a weight of 14 or 7, the residual  
22 analysis, that is, how good is the model analysis I  
23 performed on her logistics model and looking at the  
24 logistics model I ran indicate to me that in however you  
25 want to look at it, this dataset is such that with those

Page 273

1 high weights, you can really create some instability.

2 It's unstable, the models you're getting.

3 Q. And when you say "unstable" or "instability,"  
4 what do you mean?

5 A. I mean by this. Again, I'll -- I have to  
6 visualize this. So you've got an X by Y grid. So the X  
7 values are down here in this dimension that you're using  
8 to predict something. This is standard just two  
9 variable regression analysis. If you've got a diagonal  
10 line this like and all the dots on your observations fit  
11 it, you've perfectly predicted Y from X. If one of  
12 those dots, though, is non on line, it's up here, it's  
13 going to pull the regression line up. It's influential.  
14 Everything is along this line and that's way up here,  
15 that's an influential observation such that it may say,  
16 okay, now you're R-squared, your coefficient of  
17 determination is, say, .87 let's say .85, whatever it  
18 might -- you pull that observation out, and it's a 1.  
19 And the coefficients will change dramatically. I can't  
20 visualize that because when you use two variables or  
21 three, all of a sudden you're, you know, three space --  
22 two space or three spaces or four space, so you can't  
23 see it.

24 But what I'm saying is, all these  
25 diagnostics in there, Cook's distance, DFBETAs,

Page 274

1 DIFFITTS, different FITTs, there's saying there's a lot  
2 of observations in here that if you take them out, all  
3 of a sudden you're going to get some big changes in both  
4 the model parameters and how well the data fit according  
5 to the model which indicates to me there's a lot of  
6 stability in the models. If she decided or someone else  
7 decided the people that were pulled out that were not  
8 citizens, if for some reason one other thing -- one  
9 other person was pulled out that had a high weight, the  
10 model would look completely different.

11 So that's what I mean about I think the  
12 dataset itself for Mississippi looks to me that it's not  
13 really the best dataset to use to try and develop  
14 models.

15 Q. And understanding -- well, strike that.

16 Did you take out these four voters you  
17 identified or some other respondents and sort --

18 A. No. Once --

19 Q. -- of see what the effect would be?

20 A. No. Once -- well, I can see the effect, see it  
21 already in here. It's telling you what the effects are.  
22 In general, it's the summary of what you're going to  
23 see. You're going to get dramatic changes in them. And  
24 I didn't pull them out and do that. Once I looked at  
25 the diagnostics, I could see, yes, this is -- these are

Page 275

1 not good signs for building a model.

2 Q. But you're not able to say what the precise  
3 effect would be or if you used different weighting,  
4 whether you --

5 A. Well, you could say what the effects are going  
6 to be in terms of the diagnostic measures, they're  
7 telling you. That's what they indicate. But if I pull  
8 them out, then that would be the next step. So I can go  
9 ahead and pull them out, but --

10 Q. You didn't do that?

11 A. No, I didn't do that. There's a lot of them  
12 that would end up pulling out because of the weights in  
13 them to start looking at them. And I could use this as  
14 a guide to see which ones and see how much they change,  
15 but I didn't do that. But the indications are, I'll  
16 stress, that you've -- and people read -- talk to  
17 somebody else who knows something about regression  
18 analysis, if you look at it, they're going to yes, the  
19 potential is there that this model could really change  
20 in parameters and/or the FITTS, the model estimates of  
21 the data or both. And that's not a good sign for a  
22 model.

23 Q. And again, you're referencing model. When you  
24 say "model," what you're talking about is using this  
25 data in some type of regression?

Page 276

1 A. Like the two logistic regression analyses.

2 Q. But again, Dr. Burch conducted other analyses  
3 that were -- with the CS data that were not --

4 A. Well, then --

5 Q. -- logistic regression analysis?

6 A. -- they -- whether or not that affects it, I  
7 don't know enough about King's ecological inference  
8 model, if that's what you're going to go to next. But  
9 that could be the case too. I just don't know enough  
10 about that model to diagnose it.

11 Q. And I wasn't talking about that all -- we'll  
12 get into it --

13 A. Okay.

14 Q. -- I again mean just sort of her arithmetically  
15 calculating voter turnout by race, using the survey  
16 responses in the weighting without --

17 A. As opposed to what she did in her first report  
18 wherein she included the population under 18 in her  
19 numbers.

20 Q. Yeah. I mean --

21 A. She's not made that kind of mistake here in  
22 that regard other than the fact she put one county into  
23 district 1 that shouldn't have been there and another  
24 one out of it. But yeah, it looks to me like she pulled  
25 the dataset correctly. And it's not her fault there, it

Page 277

1 looks to me it's just a condition of the dataset.

2 Q. When you say Dr. Burch concluded ignoring the  
3 warning found at the CES study guide. "We advise  
4 caution when analyzing very small subsamples as random  
5 measurement error may lead to faulty inferences about  
6 analyzing very small subpopulations."

7 A. Yeah. And I may not have expressed that in the  
8 best way, but what I'm getting at is the fact that what  
9 I just said, there's -- some of these categories of  
10 people of white, male, age 18 who has a less than a high  
11 school education X, Y, Z, and you have the bond  
12 (phonetic) to it, all of a sudden you're not at whatever  
13 the white count was of voters, you're down to a really  
14 small number. And then they're trying to match that  
15 either or both to the American Community Survey or the  
16 Current Population Survey, and suddenly you've got a  
17 really small number -- a sub sample that gets a  
18 tremendous weight.

19 Q. And so if you were analyzing that very small  
20 subpopulation like a white, you know, person of a  
21 particular age, education, you know, geographic  
22 location, etcetera, that's where that warning that you  
23 reference would come in?

24 A. Yeah. And then what happens is, in general  
25 when you're modeling, you have those kinds of conditions

Page 278

1 because weights are set on those small categories, the  
2 subcategories, and you start seeing, okay, I can see it.  
3 Whatever the categories were for that person, the fact  
4 that you've got a weight of 14 or 7 or 9, says you're  
5 dealing now with really small sub samples that are part  
6 of your larger sample, and it's going to affect what  
7 you're going to do because they've got these weights on  
8 them.

9 Q. But that isn't what this warning from the study  
10 guide is talking about; right? They're talking about  
11 when you analyze the very small subpopulation, when you  
12 break it out of the survey, not the mere fact that that  
13 subpopulation is included among the larger population  
14 that you're looking at?

15 A. Well, you know, it's hard to say. These people  
16 run models, don't they, they built the study, you just  
17 cited one of them in a study you showed me. They're  
18 building models. So maybe they understand those issues  
19 and maybe the way they worded it was not so great, and  
20 what they're talking about is, you need to be careful  
21 because of these issues, and that's their way of saying  
22 that. I can't speak to them. You'd have to ask them.

23 Q. So you don't know whether their meaning was the  
24 one that you're interpreting?

25 A. Right. Or both. You know, the way you're

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 279

1 interpreting or both, yeah, I don't know.

2 Q. And just looking at the page that you're  
3 referencing there when you look at that, this is on page  
4 23 of the study guide.

5 A. Of their study guide.

6 Q. Of their study guide --

7 A. Right.

8 Q. -- right.

9 A. Where they say be careful of the  
10 subcategories --

11 Q. Correct.

12 A. -- that's what I'm referencing.

13 Q. And they then say: "Follow the link for more  
14 information about this issue," and they cite an article.  
15 Did you look at that article?

16 A. Yeah, I can't remember if I did or not, no.

17 MR. SAVITZKY: Well, let's mark it. Getting  
18 down to the end here.

19 MR. WALLACE: On that subject, we started  
20 before 9:00, we took out a little less than an hour for  
21 lunch, and about ten minutes for me to check out. So  
22 giving you those breaks, I think we're done by 5:00. If  
23 you count it differently, let me know.

24 MR. SAVITZKY: You tell me.

25 MS. JONES: One hour and 11 minutes. So

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 280

1 almost one hour, ten minutes.

2 THE WITNESS: That's 5:00.

3 MS. JONES: And that's a rough.

4 MR. SAVITZKY: Yeah, so probably closer to  
5 5:20-something but --

6 MR. WALLACE: No. We started before 9:00,  
7 but, you know, if you get there and we've got one  
8 question left, that's one thing. If you're starting a  
9 new subject, we're going home.

10 MS. JONES: So we -- can we go off the  
11 record to talk about time?

12 MR. SAVITZKY: Let's go off the record for  
13 one second.

14 (Discussion held off the record.)

15 MR. SAVITZKY: Back on the record. And I'll  
16 mark as Exhibit 26 the article that's linked there in  
17 the study guide.

18 A. Yeah.

19 Q. And you looked at this article?

20 A. Let me refresh my memory. I did.

21 (Witness reviewing exhibit.)

22 A. And in general, this article, again, goes to, I  
23 think, the definition of small sample sizes, subsamples  
24 that you were describing. But the fact that these  
25 people also built models in the same vein as logistic

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 281

1 models would suggest to me that they might even be  
2 saying in there even though it's not stated that  
3 precisely that you need to be careful using some of  
4 these data because of the weights. I mean, I found it  
5 amazing, and I can't say I read every page exactly, but  
6 I don't recall seeing a super warning anywhere in this  
7 dataset about the fact you may run into high rates,  
8 really large weights, and then being careful to use it.  
9 Did I miss something?

10 Q. No. They represented it or they say they  
11 trimmed the weights at 7 for the common and 14 for the  
12 post, I think?

13 A. Yeah, that might be it. That's about it. But  
14 those are some big weights in a survey, in my opinion,  
15 in my experience as with surveys.

16 Q. But you're not saying that they're inaccurate  
17 based on what they're trying to attribute --

18 A. No.

19 Q. -- to the population?

20 A. No, no.

21 Q. And just looking at the article that we just  
22 marked as Exhibit 26, you would agree that what the  
23 authors there talking about and what the warning that  
24 you reference in your report is talking about is  
25 analyzing the behavior of relatively rare individuals in

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 282

1 a population; in other words, if you were looking at  
2 black voters of a certain age, etcetera, etcetera, and  
3 looking at that and looking at the behavior of that  
4 subpopulation, not the mere presence of the  
5 subpopulation in the sample?

6 A. But -- well that gets to my point. If they're  
7 warning about looking at people like that that are  
8 really a small sample and that's in your dataset and  
9 they have a large weight, they could affect what you're  
10 doing to build a model. That goes back to the point I'm  
11 making. So maybe that's what they meant. They didn't  
12 state it precisely, so I can't speak to what they  
13 thought they were saying. But after running the  
14 analysis and looking at all this, it sure indicates to  
15 me that they've got weights in there that are so large  
16 and they're so many people with such large weights that  
17 you get a lot of instability in the models you're trying  
18 to construct from if you're trying to do regression type  
19 models.

20 Q. If you're trying to do regression-type models?

21 A. Yes.

22 Q. But if you're not doing the regression-type  
23 models, this instability is less of a concern?

24 A. I don't know. It depends on the context of  
25 what you're trying to do with it. It might be a

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 283

1 concern. For example, if you're doing a t-test and if  
2 one of the persons was pulled out of the sample, that  
3 makes a difference in the test score, it could make a  
4 big difference.

5 Q. Now turning to Dr. Burch analysis of the CES in  
6 her rebuttal report which was marked as 18, Exhibit 18,  
7 and looking at page 5, she reports the CS team was able  
8 to validate that 53 percent of the respondents voted in  
9 the 2020 general election.

10 A. I don't have it in the front of me, but I  
11 believe you if that's what she said.

12 MR. WALLACE: Which page?

13 MR. SAVITZKY: Page 5, last paragraph.

14 Q. And you don't dispute that using the common  
15 weight weighting, that's accurate?

16 A. No, I don't.

17 Q. And you don't dispute that that's fairly close  
18 to the 58.7 percent turnout reported by the secretary of  
19 state in the official totals?

20 A. That's correct. I don't dispute that.

21 Q. And on page 6 of her rebuttal report, Dr. Burch  
22 reports that breaking this -- and this is the first  
23 sentence on the top of that page: "Breaking the CES  
24 data down further by race, 60 percent of white  
25 respondents and 46 percent of black respondents voted in

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 284

1 Mississippi in the 2020 election." Again, you don't  
2 dispute that using the common weight weighting, that's  
3 accurate?

4 A. That's correct.

5 Q. And Dr. Burch reports that she conducted a  
6 logit regression analysis, she said: "My regression  
7 analysis validated turnout by race, and the CES confirms  
8 these percentages finding the same large statistically  
9 significant gap between black and white Mississippi  
10 voters."

11 A. That's right. Brings into play all the  
12 criticism I have of the dataset when using logistic  
13 regression.

14 Q. But you don't dispute that that is the result  
15 of the logit regression analysis run on the data?

16 A. No, I don't despite that.

17 Q. And you don't dispute that that matches up with  
18 what simply arithmetically calculating the validated  
19 voting for black and white voters in the --

20 A. I don't dispute that.

21 Q. Okay. And looking at paragraph 29 of your  
22 surrebuttal report, you say Dr. Burch does not describe  
23 the fit of her model to the data and whether or not any  
24 of the assumptions underlying logistic regression, it  
25 would suggest the regression model was violated?

Page 285

1           A. Correct.

2           Q. And you don't cite any support for the  
3 suggestion that a goodness-of-fit test is required for a  
4 binary login analysis?

5           A. Well it's my oversight, but I assume that  
6 anybody who runs a model understands that it should have  
7 a good fit if you're going to use it. So that was my  
8 mistake in not citing a whole bunch of references saying  
9 that you should use it, because my understanding with  
10 every researcher, the idea is, you have a model and you  
11 should report what it looks like. I just thought that  
12 would be common knowledge, so my error.

13           Q. Would you agree that model diagnostics can  
14 create as many problems as they solve?

15           A. Well depends on --

16           MR. WALLACE: I guess I'll object to the  
17 form, but he my answer.

18           A. I guess it depends on what the problem is. So  
19 if you're trying to build a model to argue something and  
20 the diagnostics suggest you don't have a good model,  
21 that would be a problem, if you follow what I'm saying.  
22 And if you're trying to build a model that's exclusively  
23 designed to do something and the model says this is not  
24 very good at doing that, it's a problem, if it -- if it  
25 means that. You look at the diagnostics and it's going

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 286

1 to create other problems, more generally I would see the  
2 problem that's being created and it's telling you you  
3 should probably not use this model or look for other  
4 variables or use some other different approach.

5 Q. Would you agree that there's no distributional  
6 assumption for a binary logistic model?

7 A. I can't remember what the distributional  
8 assumptions are on binary logistics models, if there are  
9 ones or not, I just can't recall if it's assuming some  
10 sort of distributional function. And there may be  
11 different algorithms through different approaches to  
12 logistic regression that do assume them and some that  
13 don't.

14 Q. Would you agree --

15 A. I don't know the answer to that off the top of  
16 my head.

17 Q. Would you agree that in a model where there's  
18 no distributional assumption, it would make less sense  
19 to use a goodness-of-fit diagnostic?

20 A. No, I wouldn't agree to that. I mean, any kind  
21 of model would -- this is semi lecture mode. So in any  
22 model, you've got -- two out -- you're doing one of two  
23 things, really. You're trying to predict something or  
24 you're trying to have a causal explanation as best you  
25 can with the model what the determinants are on

Page 287

1 something. And it -- it looks like she's doing both in  
2 some of these models. But basically, it's -- the  
3 overall focus is on prediction. And if you're going to  
4 predict something, that is, you're going to classify  
5 people into one group or another group, then you need to  
6 be very careful about how well your model fits. It may  
7 be less important if you're focus is on you're trying to  
8 explain things. It may be that you've got a really low  
9 explanatory power in your model but it's sufficient to  
10 say I think this variable, whether or not you've  
11 completed high school, has a fairly large effect on what  
12 your future income's going to be at age 50. That's a  
13 different story. But if you're trying to put --  
14 classify and correctly put things, you better have a  
15 model that fits well; otherwise, you get things like  
16 where it said right in here where I said classification  
17 system's only .57, it's not better than just, you know,  
18 randomly tossing a coin and saying every time I'm going  
19 to say heads and I'm going to be right 50 percent of the  
20 time. And that part is definitely in the literature  
21 about saying if you are not well over that, you don't  
22 have a very good model. And that's consistent with all  
23 the diagnostic things I looked at, that the model is not  
24 particularly good.

25 THE REPORTER: I think we lost everybody on

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 288

1 Zoom.

2 MR. WALLACE: Hold on.

3 MR. SAVITZKY: Let's go off for a second.

4 (Discussion held off the record.)

5 MR. SAVITZKY: Back on the record.

6 BY MR. SAVITZKY:

7 Q. And did you run those model diagnostics  
8 yourself?

9 A. Yes.

10 Q. That's what you were talking about earlier?

11 A. Yes. The examples I pointed to are all models  
12 I ran. I replicated her model first and then said here,  
13 if I put these different weights in, here's what you  
14 get.

15 Q. In your surrebuttal report, you say that  
16 Dr. Burch's analysis was wrong because she should have  
17 used the -- she should not have used the common weight  
18 weighting?

19 A. Yes, that's what I said.

20 Q. Do you still agree with that?

21 A. I -- I might revise that. I think it's still  
22 better to have used the weights that I ended up using in  
23 the suggesting.

24 Q. And you said in your report -- and again, if  
25 you want to revise that and back off that statement, we

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 289

1 don't have to get into it, but --

2 A. Yeah. And I just said yes, I think she's not  
3 as incorrect as I thought she was initially when I read  
4 it.

5 MR. WALLACE: Let's get what paragraph we're  
6 talking about so we know what you're revising.

7 Q. Let's talk about paragraph 37 in your rebuttal  
8 report. You say --

9 A. Yes.

10 Q. -- "Because Dr. Burch uses the validation  
11 variable in her logistic model, she should have used the  
12 common post weight weighting because she's reaching  
13 across to the postelection wave with a validation of I  
14 voted takes place." Right?

15 A. Correct.

16 Q. But as we discussed, the validation is done  
17 independently of the postelection wave questioning?

18 A. That's correct.

19 Q. There are numerous validated voters, as we went  
20 through, who did not answer the postelection wave and  
21 who are omitted from common post weight; right?

22 A. Correct.

23 Q. So Dr. Burch was not reaching across to the  
24 postelection wave, she was analyzing a variable  
25 validated voting that applies to the entire sample?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 290

1           A. That's correct.

2           Q. And because she was looking at the entire set  
3 of 462 or 460 minus the non-citizens respondents, common  
4 weight which is used for all adults where none of the  
5 variables from the postelection wave of questions being  
6 studied was the correct weight to use?

7           A. That is correct.

8           Q. And that is what I was referring to which  
9 should be corrected.

10           And turning back to Dr. Burch's rebuttal  
11 report on page 6, she then discusses another analysis  
12 where she looks into overreporting. And we can --

13           A. That's Exhibit 18 again?

14           Q. Correct. So Dr. Burch first looks at -- she  
15 concludes that 60 percent of white respondents and  
16 46 percent of black respondents voted in the city based  
17 on the CES data, and then she also said: "It's worth  
18 noting the CES allows us to examine overreporting of  
19 voting." Right? So she looks at what is turnout by  
20 race, and she also looks at overreporting; right?

21           A. I believe that's correct. So we're on page 6;  
22 right?

23           Q. Page 6, the paragraph at the bottom under the  
24 chart.

25           A. Yes, yes.

Page 291

1 Q. Right? So she's -- having looked at sort of  
2 what are the CES numbers show from (inaudible) she then  
3 says we can use this data to examine overreporting of  
4 voting by black voters and white voters; right?

5 A. She states that, yes.

6 Q. And she says the CES -- excuse me. The CES  
7 allows us to examine overreporting of voting by  
8 comparing self reported voter turnout to validated voter  
9 turnout; right?

10 A. Correct.

11 Q. Conceptually that makes sense; right?

12 A. Yes.

13 Q. So what she's doing, she's looking at  
14 respondents who reported voting in the second wave of  
15 questions, and she's seeing how many of those folks were  
16 actually independently validated as having voted; right?

17 A. That's, I believe, what she was doing, yes.

18 Q. And because this time she's looking at a  
19 variable from the postelection wave of questions, she  
20 uses the common post weight weighting as she notes in  
21 Footnote 22; right?

22 A. Yes.

23 Q. Okay. And Dr. Burch reports that 74 percent of  
24 white Mississippi respondents who said that they voted  
25 in the second wave actually did so according to the

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 292

1 independent validation; right?

2 A. I believe that's correct, yes.

3 Q. And you don't dispute that?

4 A. No.

5 Q. And she says that by contrast, 57 percent of  
6 the black Mississippi respondents who said they voted on  
7 the second wave were actually validated?

8 A. That's correct.

9 Q. You don't dispute her numbers on that?

10 A. No.

11 Q. And you replicated them, actually?

12 A. Yes.

13 Q. And you agree that using a common post weight  
14 weighting, they're accurate?

15 A. Yes.

16 Q. Now, at pages 8 and 9 of your report, your  
17 surrebuttal report, you say that: "Rather than using  
18 common post weight for this analysis comparing reported  
19 voting to validated voting, Dr. Burch should have used  
20 VV weighted post." Do you also want to revise that  
21 assertion?

22 A. Yeah, I think she still should have used it,  
23 but I think you're correct, that's a mistake I made.

24 MR. WALLACE: It's on page what?

25 THE WITNESS: 8 and 9.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 293

1                   MR. WALLACE: Of yours.

2                   THE WITNESS: Correct.

3 BY MR. SAVITZKY:

4                   Q. Right. And we discussed the VV weights only  
5 include people who were independently validated as being  
6 registered?

7                   A. Correct.

8                   Q. And that would mean excluding people who were  
9 reported -- who reported that they voted on the second  
10 wave of survey question but, in fact, weren't registered  
11 and didn't vote?

12                  A. Correct.

13                  Q. And if you're trying to detect overreporting,  
14 you're going to exclude potentially a lot of  
15 overreporting that way?

16                  A. Correct.

17                  Q. And by the way, do you know if there were  
18 respondents like that in the sample who reported voting  
19 but in fact were not registered and were excluded from  
20 the --

21                  A. I believe there were. I would have to go back  
22 and look, but I believe there were instances like that.

23                  Q. And we actually -- I mean, can look at them.

24                  A. We can.

25                  Q. Just briefly, we can pull back out what's

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 294

1 Exhibit 25. And just starting with row 29. Tell me  
2 when you're ready?

3 A. I'm ready.

4 Q. And this is a person who on CC2401, the  
5 question whether they voted, they said I definitely  
6 voted; right?

7 A. Yes.

8 Q. Voter status N/A, no validated vote and the VV  
9 weight given the zero weight --

10 A. Yes.

11 Q. -- and they are excluded?

12 A. Yes.

13 Q. 47 is another one on this page, right, I  
14 definitely voted.

15 A. Yes.

16 Q. No validated vote, no registration, no weight  
17 in the VV weights?

18 A. That's correct.

19 Q. And we could go through those. Would you  
20 dispute it if I told you there are 45 respondents in the  
21 Mississippi sample who said that they voted but whose  
22 registration was not independently validated?

23 A. No, I believe you. I believe that that --

24 MR. WALLACE: Registration or voting was not  
25 validated?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 295

1                   MR. SAVITZKY: Well, neither.

2                   A. Neither, yeah.

3                   Q. You wouldn't dispute that it's 45?

4                   A. No.

5                   Q. And there were 15 instances that you found of  
6 overreporting by respondents whose registration was  
7 validated?

8                   A. I believe that's correct.

9                   Q. And you discuss in your report how with only I  
10 think it was six white voters who over -- registered who  
11 overreport and only 9 black voters who overreported,  
12 that's a example of the small samples?

13                  A. Exactly.

14                  Q. But in fact, the total numbers of respondents  
15 who overreported is not 15, it's 60?

16                  A. But even when you have the denominators in  
17 there, I think I -- didn't I perform a t-test there?

18                  Q. Well, you performed a t-test on looking at that  
19 six versus 9.

20                  A. Right. But there's not -- there's a  
21 denominator in there, that that's the key point. That's  
22 the 6 versus 9, so the sample is still small, and it's  
23 indistinguishable. It's not just the fact that it's 6  
24 to 9 -- what's the paragraph number? And I can be more  
25 accurate on that.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 296

1 Q. I believe it's paragraph 25.

2 A. Yes. So the test is not 6 versus 9, it's 6 out  
3 of 140 and 9 over 61. That's the test. That's what  
4 gives you the percent, that's the mean. And that --  
5 when you ran that test with those numbers, 6 over 140  
6 and 9 over 67 and run a t-test on it, are the means the  
7 same, yields the result, you know, with a alpha level of  
8 .05 that you cannot distinguish statistically between  
9 the two groups.

10 Q. But as we've established, the numerator and the  
11 denominator are all based on the VV weight -- or rather,  
12 the enumerator is based on the VV weight, and the  
13 denominator is too.

14 A. Yeah, I think it's consistent in this. I'd  
15 have to look at the details of it, but I ran it  
16 consistently, I believe. And so when you look at it  
17 that way, it just says they're =not statistically  
18 significant.

19 Q. Right. And my point is that you ran that  
20 t-test using the weighting that excluded most of the  
21 voters who overreported?

22 A. I'd have to go back and look at it to -- but  
23 you may be right.

24 Q. Well, we just discussed that you used the VV  
25 weight?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 297

1           A. That's correct.

2           Q. And that we just discussed the VV weight would  
3 exclude 45 of the 60 respondents who overreported  
4 voting?

5           A. Yes.

6           Q. So you ran your t-test on data that excluded  
7 most of the people who overreported?

8           A. And to answer the question -- to answer the  
9 question you're asking, I -- we could run it again with  
10 the different denominator and see what happens. It may  
11 be a different result or the same.

12          Q. Well, let's answer the question I did ask. You  
13 ran your t-test on data that excluded most of the people  
14 who overreported voting; right?

15          A. That could be the case, yes.

16          Q. I think a yes or no would be proper --

17          A. Okay. Yes.

18          Q. -- to be objective. Yes; right?

19          A. I'll say yes.

20          Q. Thank you. And you didn't run a t-test on the  
21 data using the common weight which would have included  
22 most of the overreporting in the sample; right?

23          A. That's correct.

24          Q. So you don't know whether the level of  
25 overreporting that Dr. Burch reports using the correct

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 298

1 weighting is statistically significant?

2 A. I don't know.

3 Q. Almost done with the CES, couple other points.

4 First, you say in paragraph 28 of your  
5 surrebuttal report: "In her use of CES data because it  
6 has validated voters, Dr. Burch analysis is again tied  
7 to the CPS." Right?

8 A. Yes.

9 Q. Dr. Burch didn't use the VV weights in her  
10 analysis in the --

11 A. Then that's incorrect. So it's just tied to  
12 the ACS.

13 Q. So this statement that Dr. Burch's analysis is  
14 tied to the CPS is not correct?

15 A. That's correct.

16 Q. And turning to pages 7 and 9 of Dr. Burch's  
17 rebuttal report. Dr. Burch uses CES data to analyze  
18 education in voting; right?

19 A. Where are we?

20 Q. Starting at page 7 of Dr. Burch's rebuttal  
21 report, which I believe is Exhibit 18.

22 A. Okay.

23 Q. Are you there?

24 A. I am.

25 Q. Okay. And you don't discuss this analysis of

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 299

1 educational -- education voting in your surrebuttal  
2 report, do you?

3 A. But you -- one of her models in the logistic  
4 modeling that she did is with this dataset, correct, her  
5 model 2?

6 Q. That's correct.

7 A. So that I did analyze.

8 Q. You don't dispute her analysis on page 7,  
9 Figure 2 of page 8 that there's a small, not  
10 statistically significant gap between black and white  
11 validated voter turnout at each educational level?

12 A. You're talking about what she's got in  
13 Figure 2 and Figure 3. No, I'm not disputing that. The  
14 only qualification I make to it, again, is even with  
15 doing some descriptive statistics, she may run into  
16 issues with the weighting if you looked at it. But no,  
17 I don't dispute it.

18 Q. But you don't dispute that her analysis  
19 indicates that education is the significant explanatory  
20 variable in explaining the difference in turnout between  
21 black and white voters?

22 A. I think she's making a leap of faith in that.  
23 Causal analysis is really hard to determine through  
24 correlations. They're correlated, but to say it's  
25 specifically the causal effect is difficult. And that's

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 300

1 one of the things you run into with regression analysis  
2 of any type or even descriptive analysis.

3 Q. I'm looking at page 16 of her report. I mean,  
4 she reports that the P value on education is significant  
5 at the .001 level for voting?

6 A. But even that -- all that does it say the model  
7 fits well, doesn't say that that's a consolation.

8 Q. Understanding, I mean, all we can do in  
9 statistics is what we can do here which is to show that  
10 there is an extremely good fit between education and  
11 voting in Mississippi. You would agree with that?

12 A. That I agree, that it's a -- it's a parameter  
13 that helps fit the data -- the model to the data. So in  
14 the statistical sense, when you look at it, if you look  
15 at the partial R-squareds and look at the standardized  
16 coefficients, which she did not report, then you can see  
17 what the effects were. But she failed to report the  
18 standardized coefficients.

19 Q. But you don't dispute that result that she  
20 arrives at?

21 A. Not in that sense, no, I don't dispute it.

22 Q. And you don't dispute the ACS data which is  
23 reflected in the chart here on page 9, educational  
24 attainment by race in Mississippi showing a large gap in  
25 attainment of bachelor's degree or higher?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 301

1 A. That's correct. I don't dispute that.

2 Q. And you don't dispute Dr. Burch's conclusion  
3 that: "While black and white people with similar  
4 educational backgrounds vote similarly, people with  
5 lower educational attainment vote at lower rates overall  
6 than people with higher educational attainment"?

7 A. I don't dispute that.

8 Q. And you don't dispute her conclusion that:  
9 "Black Mississippians are more likely to have lower  
10 educational attainment and thus lower voter turnout than  
11 white Mississippians"?

12 A. I don't dispute that.

13 Q. And --

14 MR. WALLACE: Objection to the form of  
15 "thus," but otherwise he may answer.

16 Q. And we can go now to the ecological inference  
17 analysis in Dr. Burch's report. I think it starts on  
18 page 9, so we can just stay where we are for the moment.

19 Looking at page 9 of Dr. Burch's rebuttal  
20 report, she explains that she conducted this ecological  
21 inference analysis using of the voter file -- the  
22 Mississippi voter file as a dataset to estimate voter  
23 turnout by race; right?

24 A. That's what she says, yes.

25 Q. You don't disagree with that?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 302

1           A. No.

2           Q. So this is not the CES, this is the actual  
3 voter history of voters in Mississippi?

4           A. Yes.

5           Q. And she aggregated turnout data from the voter  
6 file up to the block group level and then married the  
7 block group level turnout data with block group level  
8 racial demographic data on non Hispanic white  
9 population, nonwhite population, and then ran the EI  
10 analysis; right?

11          A. I think her definition of nonwhite included  
12 Hispanics who were white among others and Indians. So  
13 as she puts in her report, it's nonwhite, so it's not a  
14 comparison between white and black. Is that correct?

15          Q. We can get into it, but yes, she runs the EI  
16 between non Hispanic white and other groups --

17          A. Correct.

18          Q. -- as a binary; right? And she does that by  
19 aggregating up the turnout data and the race data,  
20 marrying them together into a dataset that can be used  
21 for EI; right?

22          A. That's correct. And I -- again, I think under  
23 the other or nonwhite category, however she described  
24 it, she has, for example, people who might -- who say my  
25 ethnicity is Hispanic but I'm white racially, and then

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 303

1       she includes every other race, whether they're Choctaw  
2       or Chinese or Vietnamese, etcetera, in that group, yes.

3           Q. And by the way, just looking at page 11,  
4       Footnote 31 -- do you see Footnote 31 there?

5           A. I do.

6           Q. -- Dr. Burch says: "Performing the analysis  
7       with non Hispanic, black alone or a combination and  
8       nonblack as reference categories also produces estimates  
9       of lower black turnout relevant to nonblack residents  
10      both statewide and in the central district." Do you see  
11      that?

12           A. Yes, but it wasn't in her original report, was  
13      it?

14           Q. I mean, it's in the surrebuttal report along  
15      with the rest of her EI analysis; right?

16           A. But that's in the surrebuttal report, that's  
17      not the report that I was commenting on. Did she have  
18      it in her original report that I comment on, that's what  
19      question I'm asking.

20           Q. She had it in the rebuttal report that you  
21      commented on in your surrebuttal report --

22           A. Yeah.

23           Q. -- right?

24           A. Yeah.

25           Q. Okay. All right. And by the -- well, we'll

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 304

1 get back to it in one second. But going back to the EI  
2 analysis. Looking at pages 10 to 11 of Dr. Burch's  
3 rebuttal report, she finds a significant racial turnout  
4 gap both statewide and in supreme court district 1. Do  
5 you agree with that?

6 A. And that's where?

7 Q. Page 10, last paragraph: "The estimates  
8 obtained using the ecological inference show that  
9 there's a statistically significant racial gap in  
10 turnout in Mississippi." Right?

11 A. And where's the results of the statistical  
12 test?

13 Q. I don't -- I'm asking you if that's what she  
14 found.

15 A. Well that's what she says, but where's the  
16 result of the statistical test, is my question.

17 Q. Did you run a statistical test to confirm  
18 whether those results are significant?

19 A. I didn't.

20 Q. Okay. You had no basis to dispute --

21 A. Well I can't answer whether or not -- what test  
22 she did and how she ran it, so I don't -- I'm not in a  
23 position to give an opinion on it right now.

24 Q. You don't give an opinion on it?

25 A. That's correct. I don't know whether or not

Page 305

1 it's -- I can't agree with it, but I don't have an  
2 opinion on it because I didn't run an independent  
3 statistical test, and she doesn't show one here, she  
4 just says she did.

5 Q. She reports that her statewide EI analysis  
6 shows that the white turnout was 58 percent, nonwhite  
7 turnout was 42 percent, 16 point gap?

8 A. She says that.

9 Q. And in the central district turnout -- black  
10 turnout is 44 percent white turnout 62 percent?

11 A. She said that.

12 Q. And by the way, when she runs well -- strike  
13 that.

14 And Dr. Burch says in the next sentence at  
15 the top of the page 11: "The statewide and central  
16 district estimates for each racial group produced using  
17 EI and the CES are realistic given what we know about  
18 the actual voter participation statewide in the central  
19 district, in other words, they match up with the  
20 benchmark reported by the secretary of state." Do you  
21 dispute that?

22 A. Well, I didn't run an EI analysis myself to  
23 look at what she did, so I'm not in a position to  
24 dispute or not dispute it.

25 Q. You don't claim that Dr. Burch didn't

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 306

1 accurately report the results of her analysis?

2 A. No, I'm not claiming that.

3 Q. With respect to the EI analysis for district 1,  
4 you say -- turning to paragraph 43 of your surrebuttal  
5 report. You say: "Dr. Burch included Adams County  
6 rather than Bolivar County in district 1"?

7 A. That's correct.

8 Q. Now assuming that's the case, do you have any  
9 reason to think that the inclusion of Adams versus  
10 Bolivar would have a material effect on the estimation  
11 of turnout by race on a districtwide basis?

12 A. I don't know the answer to that until I've  
13 looked at what the results would be.

14 Q. You didn't look at the results?

15 A. I didn't.

16 Q. Do you know the populations of those two  
17 counties are nearly identical 28,000 versus 30,000?

18 A. No, I didn't.

19 Q. Did you know they're both black majority  
20 counties?

21 A. No, I didn't.

22 Q. Would it stand to reason that in a district of  
23 750,000 by voting age population including one  
24 similarly-sized majority black county versus another is  
25 not going to make a difference in terms of measuring the

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 307

1       districtwide turnout gap using EI?

2           A. No, I'm not going to agree to that because I  
3       don't know what she did in the EI, and I don't know what  
4       other factors may have come into play.

5           Q. But you didn't run an analysis yourself to  
6       check?

7           A. Yes, I didn't.

8           Q. Have you received any further information about  
9       whether or not Dr. Burch conducted -- looked at it with  
10      Bolivar instead of Adams?

11          A. I think she did and sent it on to the  
12      attorneys, but Mike and I haven't looked at it.

13          Q. Do you know what the overall result that she  
14      obtained was?

15          A. No, I don't.

16          Q. If I told you the result was so similar that we  
17      didn't have to change anything in the report, would you  
18      dispute that?

19          A. No, I wouldn't dispute it other than the fact  
20      that someone had the wrong county in there.

21          Q. Right. But you wouldn't dispute that the  
22      results don't actually change if I represented that to  
23      you?

24          A. No, I wouldn't.

25          Q. You also say that because Dr. Burch coded

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 308

1 racial demographic information as white and nonwhite,  
2 more specifically not Hispanic white versus non -- non  
3 Hispanic white, she is expressing an opinion about white  
4 voters relative to nonwhite voters, not an opinion about  
5 white voters relative to black voters?

6 A. Correct.

7 Q. All right. But you would agree that in  
8 Mississippi, the vast majority of nonwhite voters are  
9 black?

10 A. I would.

11 Q. You would agree that black and white  
12 Mississippians together form 96.5 percent of the  
13 population of Mississippi?

14 A. I'd have to look at it, but that sounds about  
15 right to me.

16 Q. Do you contend that the existence of a small  
17 number of nonwhite, nonblack Mississippians means that  
18 it's not possible to draw inferences about black  
19 Mississippians' voting behavior based on the actions of  
20 nonwhite Mississippians?

21 A. The issue I have with it is more why not stay  
22 with the black population? Why change the racial  
23 definitions for this part of the analysis? That's the  
24 problem I have with it.

25 Q. But given that 4 percent of the state's CVAP is

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 309

1 nonblack or nonwhite or thereabouts, doesn't matter if  
2 the turnout in that group is 0 percent or 100 percent?

3 A. It's a question I can't answer without looking  
4 at that data. It might be just as with the cases of  
5 some of these observations that are in the CES file  
6 where they have large weights, there could be effects  
7 that are like that. So offhand, I'm not able to answer  
8 that question without looking at the data.

9 Q. I mean, even if the turnout among that small  
10 number of nonblack potential voters who are included in  
11 the nonwhite category for purposes of the EI analysis  
12 was 0 percent, the implied black turnout rate would go  
13 up by 4 percent?

14 A. Again, it's a question that -- you can ask it  
15 as many different ways as you can. My point goes back  
16 to: Why didn't she look at black voters in the first  
17 place? And to answer the question that you're trying to  
18 ask me, it could be that among those 4 percent are cases  
19 that are -- that are going to be significant as found in  
20 the CES file. So I don't know, so I can't answer the  
21 question.

22 Q. And again, this isn't a survey, this is based  
23 on the voter file itself, that's the dataset here.

24 A. Yeah, and I'm not saying it's from a survey,  
25 I'm saying again there's, you know, why switch the

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 310

1 definition? And I can't answer the question without  
2 knowing more of it or if I started looking deeper in the  
3 analysis, which I haven't done.

4 Q. And as we discussed, looking again at  
5 Footnote 31 of Dr. Burch's report, she actually did look  
6 at black versus nonblack turnout, and she found looking  
7 again at that footnote that black turnout was estimated  
8 to be

9 42 percent while nonblack turnout was estimated to be  
10 57 percent. Any reason to dispute that?

11 A. Yeah, and then there's -- again, why is it  
12 black versus nonblack, is the question. Why isn't it  
13 black versus white?

14 Q. Right. So the question is: Do you dispute  
15 that that's the result that she obtained?

16 A. I believe that -- I believe whatever the  
17 results she's pointing at, I think she's doing as  
18 accurately as she can. The issue is white versus black  
19 and suddenly we're in white and nonwhite, and then we're  
20 in black and nonblack.

21 Q. Well, having estimated black turnout at  
22 42 percent and having estimated white turnout at  
23 58 percent, can you not look at both the EI analysis and  
24 then say she did look at white turnout and black  
25 turnout?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 311

1           A. My question is: Why didn't she do it? You  
2 don't have to ask me that question, ask her why she  
3 didn't stick with the same categories. I don't know the  
4 answer to that.

5           Q. Right. And --

6           A. All I can say is that I'm looking at something  
7 that says you're looking at these two categories and now  
8 suddenly the categories are switched. So it's difficult  
9 for me to answer those questions.

10          Q. Right. My question --

11          A. Regardless of what the numbers are or anything  
12 else, it's why -- why change?

13          Q. Well, I mean, I understand. But my question  
14 is: It seems like she did do that, that looking at the  
15 data, she ran the analysis both white versus nonwhite  
16 and black Versus nonblack, and so she does provide that  
17 information that you're looking for in her report.

18          A. But it's not direct, it's not white versus  
19 black. And that's a problem because that's what most of  
20 her analysis and that's what it seems everything in this  
21 is based on.

22          Q. Well, it's the same --

23          A. No matter how many times you ask me this,  
24 that's going to be my same answer. I can tell you right  
25 now.

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 312

1 Q. Well, why can you not look --

2 A. Because it's -- the problem is, why did someone  
3 change the categories they're doing an analysis from  
4 white to black to now it's nonblack and -- or nonwhite?  
5 To me, I don't understand the reasons for the change.  
6 And you have to wonder why it was done. And could the  
7 categories in the definitions by race in the voter file  
8 be different than they are elsewhere? Is that the  
9 reason? I don't know. And it could be that -- you  
10 know, it could be that there's lots of other issues  
11 there, and I'm going on the voter file about race and  
12 ethnic definitions that are not brought to the surface  
13 here. I don't know the answer to that.

14 Q. Well again, the dataset for the EI analysis we  
15 also discussed, the racial data comes from the census,  
16 right, block group level census data on race; right?

17 A. Yes.

18 Q. That's the source of the data?

19 A. Yes.

20 Q. Okay. So let's --

21 A. But the source of the data is -- it's the  
22 PL94171 data file.

23 Q. Yes.

24 A. Yes. Okay.

25 Q. So understanding that we're using census data,

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 313

1 that it's the same dataset --

2 A. I understand. But in looking at that, another  
3 issue that comes into play that she doesn't mention is,  
4 what's the effected differential privacy when you get  
5 down to that smaller end, the differential privacy  
6 protections that the census bureau has placed on small  
7 area data, which I believe are even in the public 94 --  
8 the PL94171 data.

9 Q. Do you have any reason to think that  
10 differential privacy has an effect on the statewide or  
11 central districtwide EI analysis of voter turnout by  
12 race?

13 A. When you're aggregating up to smaller levels,  
14 up to some point they might. The census bureau will  
15 claim that's when you get to the state level or even  
16 lower levels that the differences wash out, but I'm not  
17 inclined to believe that that's necessarily the case,  
18 and they certainly appear at smaller levels of  
19 geography.

20 Q. This isn't something you mention in your  
21 report?

22 A. No.

23 Q. Is it something you're just thinking about  
24 right now?

25 A. It's -- it is something that I think can have

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 314

1 an effect on it when you start using different datasets  
2 like that and go down to small areas, yes.

3 Q. And setting aside the punitive effect of  
4 differential privacy, you would agree that using a  
5 single dataset based on Mississippi voter data from the  
6 secretary of state and race data from the U.S. census,  
7 Dr. Burch measured using EI white turnout and black  
8 turnout, and we can compare them?

9 A. I don't agree with that statement at all,  
10 because I don't know what the definitions are in the  
11 Mississippi voter dataset, how they might vary, what  
12 kind of matches you get between the two. So the --  
13 again, I can go back and answer you why switch from  
14 white versus black to white, nonwhite and then black,  
15 nonblack. I just don't understand the basis for that.

16 Q. What do you mean by definition in the  
17 Mississippi voter data?

18 A. Whatever -- how are people defined? Is it self  
19 reporting? When -- what are the definitions of race  
20 that are in the Mississippi voter data file?

21 Q. The voter --

22 A. It's not in there, is it?

23 Q. I will tell you the voter data --

24 A. Yeah.

25 Q. -- In Mississippi does not --

Page 315

1 A. Not in there.

2 Q. Which is why --

3 THE REPORTER: Gentleman, one at a time,  
4 please.

5 A. That's the point I'm bringing up. So that's  
6 not there. So what you're relying on -- totally on the  
7 census bureau data for race.

8 Q. Right.

9 A. And again, if you've got the sentence data for  
10 race, you've got black, you've got white, you've got all  
11 the other race categories, why not use them?

12 Q. We talked about how you used an EI type  
13 analysis in the early nineties; right?

14 A. That's current.

15 Q. You haven't run an EI analysis since then?

16 A. No.

17 Q. Do you have much familiarity with the type of  
18 EI analysis that Dr. Burch ran in this case?

19 A. I can see Beijing type analysis. I looked  
20 through what's on the websites and some of the  
21 documentation for the -- both the hard version, the easy  
22 version of Brinnon (phonetic), and that's what I know.  
23 And for example, one of the points I made in my report  
24 about it, she didn't report any priors on what the  
25 distributions are and assumptions. And that's usually

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 316

1 common in a Beijing analysis.

2 Q. And --

3 A. But that still doesn't get to my question.

4 Why, if you've got the data for white and black and why  
5 switch the racial categories? I don't understand why  
6 she would do that.

7 Q. Are there reasons why if you're doing an  
8 analysis like this, you would not want to include a  
9 third group as a very small population?

10 A. I don't know the answer to that. I just -- my  
11 question still is: Why not look at black versus white  
12 if you've got the data for it?

13 Q. How would you go about looking at black versus  
14 white?

15 A. Well, she had it. She's using the ACS;  
16 correct? They use those same racial categories,  
17 correct, in her EI analysis. That's in there; correct?  
18 Where did she get the data for race if it's not from the  
19 ACS?

20 Q. From the U.S. census, from the PL --

21 A. The PL9R, yeah. My mistake. So from that  
22 dataset, they're in there too, white, black, any part  
23 black, all those issues. So why switch?

24 Q. So you're suggesting that the EI analysis could  
25 also have been run with many different racial categories

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 317

1 estimating the voter turnout not only of black voters  
2 and white voters but also of American Indian voters and,  
3 you know, Hispanic voters, understanding --

4 A. That's not what I'm suggesting. What I'm  
5 suggesting is -- and I'm asking the question -- why  
6 didn't she run that analysis? Why did she switch the  
7 categories from what she did elsewhere in her report  
8 where it's white and black? That's what's I don't  
9 understand.

10 Q. Right. And I guess I'm asking: How would you  
11 run an EI analysis on more than two variables --

12 A. It's not running more than two.

13 Q. -- reference categories?

14 A. How did she run it -- it's the same thing.

15 Here's white, nonwhite. She ran that; correct?

16 Q. Correct.

17 A. Why didn't she run white, black?

18 Q. Right. And I'm asking the questions, I'm not  
19 going to answer them. But you don't -- you don't  
20 know -- I think the answer is clearly you don't, but you  
21 don't know of reasons why you would want to consolidate  
22 voters into two reference groups in order to, for  
23 example, not have part of your analysis be on very small  
24 numbers of members of a particular racial group that's  
25 not white and not black because the effects would be

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 318

1 less accurate?

2 A. I didn't say she needed to run it on, say, the  
3 Cherokee population. I'm saying why didn't she just run  
4 white versus black? She didn't do that. She ran white  
5 versus, you know, non Hispanic white versus everybody  
6 else.

7 Q. Do you know whether it's possible to do the  
8 thing you're suggesting using EI analysis?

9 A. Why didn't she do it? That's a question I'm  
10 asking. I can't answer that question. I don't know  
11 what's possible in the EI analysis. My question is:  
12 Why didn't she run white versus black? Because  
13 everything in the reports up to this point are -- uses  
14 those two categories. It's not nonwhite, did you report  
15 to me something about, well, here's the nonwhite VAP in  
16 a certain county, and they outnumber the white VAP. No.  
17 It was all white versus black. So why is it suddenly  
18 changing in the EI analysis to a new category of race?  
19 That's my question.

20 Q. And Dr. Burch found that white turnout was 58  
21 percent statewide and 62 percent in district 1?

22 A. Using the definition of white that she used in  
23 the EI analysis?

24 Q. Non Hispanic white as defined by the census?

25 A. Yes.

Page 319

1           Q. And she found that non Hispanic black alone or  
2 in combination turnout was 42 percent statewide and  
3 43 percent in district 1?

4           A. That's on -- where is that found again?

5           Q. Footnote 31.

6           A. That's what she says. But again, why didn't  
7 she just put that in her report? And again, down here,  
8 it says again it's -- it's black turnout is estimated  
9 this while nonblack turnout was this. Why didn't she  
10 have black versus white even in this footnote? That's  
11 what I don't understand. She has white, nonwhite, and  
12 then down here she has black, nonblack. And why the  
13 switch? To me, that's mystifying.

14          Q. But you don't run an EI analysis, so you  
15 wouldn't be able to say whether there's an  
16 understandable reason to construct your analysis that  
17 way?

18          A. Well, no matter what analysis, I would be  
19 running ones I was familiar with or not. The question I  
20 would ask is: Why did someone switch these categories  
21 in this way? To me, that's -- it's not a good sign.  
22 And whether or not it's -- it's okay that the numbers  
23 are really small and everything turned out to be the  
24 same; if that's the case, why not run it that way  
25 instead of do this?

Page 320

1           Q. It's not a good sign because you don't  
2 understand why she did it?

3           A. Yes. She doesn't give any explanation. So  
4 reading the reports that she does, white, black, white,  
5 black, white, black. So when we get to this point, it's  
6 white, nonwhite, and even down here in the footnote it's  
7 black, nonblack.

8           Q. Because this is a different analysis, the EI  
9 analysis?

10          A. I understand. But the whole function of the  
11 report wasn't to suggest that it's black voters that are  
12 turning out at a lower rate than white voters. Isn't  
13 that the intent of the entire exercise here? I'm asking  
14 you. So all of a sudden, we have black and nonblack and  
15 then white and nonwhite.

16          Q. So it could be that she did it this way to  
17 ensure the accuracy of her results?

18          A. But if that's the case, why would that be more  
19 accurate than saying white and black and black and  
20 white? I don't know the answer. I can't answer what  
21 she did in the analysis. All I can do is read what she  
22 said. And what she says is not consistent with things  
23 she said elsewhere up to this point in the report she's  
24 done.

25          Q. She constructed a different analysis

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 321

1 differently?

2 A. That's what it appears to be. That's my  
3 question, is, you know, why? Doesn't seem to be the  
4 topic.

5 Q. So just zooming out and talking about your  
6 surrebuttal report, how much time did you spend putting  
7 that surrebuttal report together?

8 A. It's quite a bit of time, especially starting  
9 to look into the EI analysis which I was not familiar  
10 with. So I spent a fair amount of time doing that  
11 thinking I don't want to have to learn R to do this, you  
12 know, it looks painful. I mean, I started down the path  
13 to do it, but then when I started reading the report  
14 again and said well, I see Dr. Burch now switched  
15 categories, and I -- that to me is a problem right  
16 there, I think I'll stop at that point.

17 Q. And how much time do you think it was total?

18 A. I'd have to look. It's a lot of hours.

19 Q. More than 40?

20 A. I don't know. Maybe. Again I'd have to look.  
21 Once I send the hours in, I don't keep track of it.

22 Q. You sent them in?

23 A. I have them -- I've got them posted. If you  
24 want to look at them, I've got an Excel spreadsheet.

25 Q. You kept records --

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 322

1 A. Yes.

2 Q. -- contemporaneous of your hours?

3 A. Oh, yes. Sure.

4 Q. Did you do any analyses that you left out of  
5 your surrebuttal report? You mentioned a t-test.

6 A. No. Other than that I did subsequently, as I  
7 said, I don't think so.

8 Q. You did the t-test subsequent to --

9 A. Well, when I was doing the original analysis, I  
10 just didn't put it in the report.

11 Q. Okay. And you can provide that to us?

12 A. I can.

13 Q. And --

14 MR. WALLACE: We will take that under  
15 consideration, and we'll let you know. You've also  
16 asked for a piece paper from the other expert and we're  
17 in the process, we'll get back to you soon.

18 MR. SAVITZKY: Thank you.

19 BY MR. SAVITZKY:

20 Q. And any -- other than that t-test, any other  
21 analysis that you sort of ran but didn't include in the  
22 report?

23 A. No.

24 Q. How about for your initial report?

25 MR. WALLACE: Same objection as to being out

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 323

1 of time. He may answer if he remembers.

2 A. I can't recall running different analysis that  
3 are not in the report.

4 MR. SAVITZKY: Just one second. Can we take  
5 three minutes, just go off. Thank you.

6 MR. WALLACE: Thank you.

7 (Short recess from 4:55 to 5:08 p.m.)

8 MR. SAVITZKY: Back on the record.

9 That concludes my questioning for  
10 Dr. Swanson at this point, so --

11 MR. WALLACE: I have one statement I need to  
12 make in response to your question about correcting  
13 things at the front end, and if you want me to ask him  
14 to swear to it, I will. He has not testified in court  
15 in the voting rights case. That was his testimony. It  
16 was true, but in an abundance of caution, he has given a  
17 deposition in the voting rights case in Louisiana. And  
18 I wanted to make sure you knew that -- I suspect you  
19 already do, but I wanted to clarify it on the record.

20 MR. SAVITZKY: And just -- that's in the  
21 Ardoин case?

22 MR. WALLACE: It is Ardoин, isn't it?

23 THE WITNESS: It is.

24 MR. SAVITZKY: Congressional redistricting  
25 case?

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 324

1                   MR. WALLACE: Correct. That all I've got.  
2 We will read and sign. And we'll respond to you once we  
3 get it.

4                   THE REPORTER: So you're ordering the  
5 transcript?

6                   MR. SAVITZKY: Yes, please.

7                   THE REPORTER: And you want a copy,  
8 Mr. Wallace?

9                   MR. WALLACE: Oh, yes.

10                  (Deposition concluded at 5:09 p.m.)

11                  (Reading and signing was requested  
12 pursuant to FRCP Rule 30(e).)

13

14

15

16

17

18

19

20

21

22

23

24

25

White v. State Board of Election Commissioners

David Arthur Swanson, Ph.D.

Page 325

1 C E R T I F I C A T E

2

3 STATE OF WASHINGTON

4 COUNTY OF WHATCOM

5

6

7 I, Evelyn M. Adrean, RPR, a Certified Shorthand  
8 Reporter in and for the State of Washington, do hereby  
9 certify that the foregoing transcript of the deposition  
10 of DAVID ARTHUR SWANSON, Ph.D., having been duly sworn  
11 on OCTOBER 5, 2023, is true and accurate to the best of  
12 my knowledge, skill, and ability. Reading and signing  
13 was requested pursuant to FRCP Rule 30(e).

14 IN WITNESS WHEREOF, I have hereunto set my hand  
15 and seal this 20th day of October 2023.

16

17

*Evelyn M Adrean*

18



19

EVELYN M. ADREAN, RPR, CCR-WA

20

21

22

23

24

25